Digitized by the Internet Archive
in 2026

https://archive.org/details/mutation-research-dnaging_1993_284-303_index

INDEX 1993

ISSN 0027-5107
MUREAV 284–303/INDEX, 1–50 (1993)

Fundamental and Molecular Mechanisms of Mutagenesis

Managing Editors:

J. Ashby
J.M. Gentile
K. Sankaranarayanan
B.W. Glickman

HML TN
QH
431
.M97
[Fun.&.mol

HML TN
QH 431 .M97 [Fun.&.mol.mec]
Mutation research.
v 284 / 303 index 00/00/19
Received: 06-29-94
UNIVERSITY OF HAWAII
AT MANOA -- LIBRARY

A Section of
ation Research
Founding Editor: F.H. Sobels

Aims and scope

MUTATION RESEARCH, Fundamental and Molecular Mechanisms of Mutagenesis publishes complete research papers in all areas of mutation research which focus on fundamental mechanisms underlying phenotypic and genotypic expression of genetic damage, molecular mechanisms of mutagenesis including the relationship between genetic damage and its manifestation as hereditary diseases and cancers. Additional 'special issues' which bring together research papers on specific themes of topical interest will also appear in this section.

Managing Editors

Dr. J. Ashby, ZENECA, Central Toxicology Laboratory, Alderley Park, Macclesfield, Cheshire SK10 4TJ, UK
Prof. J.M. Gentile, Biology Department, Hope College, Holland, MI 49423, USA
Prof. K. Sankaranarayanan, Department of Radiation Genetics and Chemical Mutagenesis, State University of Leiden, Sylvius Laboratories, Wassenaarseweg 72, P.O. Box 9503, 2300 RA Leiden, The Netherlands
Prof. B.W. Glickman, Director, Center for Environmental Health, Department of Biology, University of Victoria, P.O. Box 1700, Victoria, B.C., Canada V8W 2Y2

Editorial Board

M. Akiyama, *Hiroshima, Japan*
R.J. Albertini, *Burlington, VT, USA*
H. Bartsch, *Heidelberg, Germany*
M.A Bender, *Upton, NY, USA*
B.A. Bridges, *Brighton, UK*
A.V. Carrano, *Livermore, CA, USA*
T.A. Cebula, *Washington, DC, USA*
J. Cole, *Brighton, UK*
E. Eisenstadt, *Boston, MA, USA*
H.J. Evans, *Edinburgh, UK*
L.R. Ferguson, *Auckland, New Zealand*
W.M. Generoso, *Oak Ridge, TN, USA*
G.R. Hoffmann, *Worcester, MA, USA*
B.A. Kunz, *Winnipeg, Canada*
M.F. Lyon, *Harwell, UK*
D.G. MacPhee, *Bundoora, Australia*
V.M. Maher, *East Lansing, MI, USA*
G.R. Mohn, *Leiden, The Netherlands*
A. Morley, *Bedford Park, Australia*
E. Moustacchi, *Paris, France*
M. Nagao, *Tokyo, Japan*
A.T. Natarajan, *Leiden, The Netherlands*
G. Obe, *Essen, Germany*
G. Olivieri, *Rome, Italy*
J.M. Parry, *Swansea, UK*
R.J. Preston, *Oak Ridge, TN, USA*
L.S. Ripley, *Newark, NJ, USA*
H.S. Rosenkranz, *Pittsburgh, PA, USA*
T.G. Rossman, *Tuxedo, NY, USA*
L.B. Russell, *Oak Ridge, TN, USA*
M.S. Sasaki, *Kyoto, Japan*
J.R.K. Savage, *Harwell, UK*
J. Thacker, *Harwell, UK*
W.G. Thilly, *Cambridge, MA, USA*
E.E. Vogel, *Leiden, The Netherlands*
R.C. von Borstel, *Edmonton, Canada*
G.C. Walker, *Cambridge, MA, USA*
S. Wolff, *San Francisco, CA, USA*
F.E. Würgler, *Zürich, Switzerland*
F.K. Zimmermann, *Darmstadt, Germany*

MUTATION RESEARCH

International journal on mutagenesis, chromosome breakage and related subjects

Vols. 284–303 (1993)

ANNUAL CUMULATIVE INDEX

1 404HI 547
XL
7/96 31249-150

Fundamental and Molecular Mechanisms of Mutagenesis

Mutation Research

INTERNATIONAL JOURNAL ON MUTAGENESIS,

CHROMOSOME BREAKAGE AND RELATED SUBJECTS

MANAGING EDITORS *Fundamental and Molecular Mechanisms of Mutagenesis:*
J. Ashby, *Macclesfield*; J.M. Gentile, *Holland, MI*; K. Sankaranarayanan, *Leiden;* B.W. Glickman, *Victoria, B.C.*

EXECUTIVE MANAGING EDITORS *Mutation Research:*
J.M. Gentile, *Holland, MI*; P.H.M. Lohman, *Leiden*; K. Sankaranarayanan, *Leiden*

FOUNDING EDITOR: F.H. Sobels, *Leiden*

EDITORIAL BOARD

M. Akiyama, *Hiroshima, Japan*
R.J. Albertini, *Burlington, VT, USA*
H. Bartsch, *Heidelberg, Germany*
M.A Bender, *Upton, NY, USA*
B.A. Bridges, *Brighton, UK*
A.V. Carrano, *Livermore, CA, USA*
T.A. Cebula, *Washington, DC, USA*
J. Cole, *Brighton, UK*
E. Eisenstadt, *Boston, MA, USA*
H.J. Evans, *Edinburgh, UK*
L.R. Ferguson, *Auckland, New Zealand*
W.M. Generoso, *Oak Ridge, TN, USA*
G.R. Hoffmann, *Worcester, MA, USA*
B.A. Kunz, *Winnipeg, Canada*
M.F. Lyon, *Harwell, UK*
D.G. MacPhee, *Bundoora, Australia*
V.M. Maher, *East Lansing, MI, USA*
G.R. Mohn, *Leiden, The Netherlands*
A. Morley, *Bedford Park, Australia*
E. Moustacchi, *Paris, France*
M. Nagao, *Tokyo, Japan*
A.T. Natarajan, *Leiden, The Netherlands*
G. Obe, *Essen, Germany*
G. Olivieri, *Rome, Italy*
J.M. Parry, *Swansea, UK*
R.J. Preston, *Oak Ridge, TN, USA*
L.S. Ripley, *Newark, NJ, USA*
H.S. Rosenkranz, *Pittsburgh, PA, USA*
T.G. Rossman, *Tuxedo, NY, USA*
L.B. Russell, *Oak Ridge, TN, USA*
M.S. Sasaki, *Kyoto, Japan*
J.R.K. Savage, *Harwell, UK*
J. Thacker, *Harwell, UK*
W.G. Thilly, *Cambridge, MA, USA*
E.E. Vogel, *Leiden, The Netherlands*
R.C. von Borstel, *Edmonton, Canada*
G.C. Walker, *Cambridge, MA, USA*
S. Wolff, *San Francisco, CA, USA*
F.E. Würgler, *Zürich, Switzerland*
F.K. Zimmermann, *Darmstadt, Germany*

Vols. 284–303 **INDEX 1993**

ELSEVIER

Amsterdam – Lausanne – New York – Oxford – Shannon – Tokyo

US mailing notice — Mutation Research, Fundamental and Molecular Mechanisms of Mutagenesis (ISSN 0027-5107) is published monthly, except semimonthly in January, April, July and October, by Elsevier Science B.V., (Molenwerf 1, P.O. Box 211, 1000 AE Amsterdam, The Netherlands). Annual subscription price in the U.S.A. US$1784.00 (valid in North, Central and South America only), including air speed delivery. Second class postage is paid at Jamaica, NY 11431.

USA POSTMASTERS: Send address changes to MUTATION RESEARCH, Publications Expediting, Inc., 200 Meacham Avenue, Elmont, NY 11003.

Airfreight and mailing in the U.S.A. by Publications Expediting.

Advertising Advertising orders and enquiries can be sent to the Advertising Manager, Elsevier Science B.V., Advertising Department, P.O. Box 211, 1000 AE Amsterdam (The Netherlands), Tel.: 20-515.3220; FAX: 20-683.3041, attn. Advertising Dept.; Great Britain: T.G. Scott and Son Ltd., Portland House, 21 Narborough Road, Cosby, Leicestershire LE9 5TA, Tel.: 0533-753.333; FAX: 0533-750.522, attn. Tim Blake; U.S.A. and Canada: Weston Media Associates, Daniel Lipner, P.O. Box 1110, Greens Farms, CT 06436-1110, Tel.: 203-261.2500; FAX: 203-261.0101.

© 1994, ELSEVIER SCIENCE B.V. All rights reserved.

No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior written permission of the Publisher, Elsevier Science B.V., Copyright and Permissions Department, P.O. Box 521, 1000 AM Amsterdam (The Netherlands).

This journal is printed on acid-free paper.

No responsibility is assumed by the Publisher for any injury and/or damage to persons or property as a matter of products liability, negligence or otherwise, or from any use or operation of any methods, products, instructions or ideas contained in the material herein. Because of the rapid advances in the medical sciences, the Publisher recommends that independent verification of diagnoses and drug dosages should be made.

Although all advertising material is expected to conform to ethical (medical) standards, inclusion in this publication does not constitute a guarantee or endorsement of the quality or value of such product or of the claims made of it by its manufacturer.

Special regulations for authors. Upon acceptance of an article by the journal, the author(s) will be asked to transfer copyright of the article to the Publisher. This transfer will ensure the widest possible dissemination of information.

Special regulations for readers in the U.S.A. This journal has been registered with the Copyright Clearance Center, Inc. Consent is given for copying of articles for personal or internal use, or for the personal use of specific clients. This consent is given on the condition that the copier pays through the Center the per-copy fee stated in the code on the first page of each article for copying beyond that permitted by Sections 107 or 108 of the U.S. Copyright Law. The appropriate fee should be forwarded with a copy of the first page of the article to the Copyright Clearance Center, Inc., 27 Congress Street, Salem, MA 01970 (U.S.A.). If no code appears in an article, the author has not given broad consent to copy and permission to copy must be obtained directly from the author. The fee indicated on the first page of an article in this issue will apply retroactively to all articles published in the journal, regardless of the year of publication This consent does not extend to other kinds of copying, such as for general distribution, resale, advertising and promotion purposes, or for creating new collective works. Special written permission must be obtained from the Publisher for such copying.

PRINTED IN THE NETHERLANDS

Mutation Research, 284–303/INDEX (1993) 1–31

© 1993 Elsevier Science B.V. All rights reserved 0027-5107/93/$06.00

Master Author Index to Volumes 284–303

Aardema, M.J., see Mailhes, J.B. (300) 155
Abbondandolo, A., see Ottaggio, L. (301) 149
Abraham, S.K., Sarma, L. and Kesavan, P.C.
Protective effects of chlorogenic acid, curcumin and β-carotene against γ-radiation-induced in vivo chromosomal damage (303) 109
Abraham, S.K., Singh, S.P. and Kesavan, P.C.
Buthionine sulfoximine mediated enhancement of γ-radiation induced mutation frequency in *Drosophila melanogaster* (301) 255
Adler, I.-D., Zouh, R. and Schmid, E.
Perturbation of cell division by acrylamide in vitro and in vivo (301) 249
Adler, I.-D.
Synopsis of the in vivo results obtained with the 10 known or suspected aneugens tested in the CEC collaborative study (287) 131
Adonis, M. and Gil, L.
Mutagenicity of organic extracts from Santiago (Chile) airborne particulate matter (292) 51
Afzal, V., see Wolff, S. (289) 107
Agarwal, K., see Mukherjee, A. (301) 87
Agur, Z., see Harnevo, L.E. (292) 17
Ahmad, M., see Qadri, S.A. (298) 53
Ahne, F., see Eckardt-Schupp, F. (289) 39
Aidoo, A., Lyn-Cook, L.E., Heflich, R.H., George, E.O. and Casciano, D.A.
The effect of time after treatment, treatment schedule and animal age on the frequency of 6-thioguanine-resistant T-lymphocytes induced in Fischer 344 rats by *N*-ethyl-*N*-nitrosourea (298) 169
Aikawa, K. and Miwa, M.
Temperature-dependent antimutagenic activity of acrolein in *Escherichia coli* (301) 93
Aizu-Yokota, E., see Oda, T. (289) 223
Akimoto, S., see Higashimoto, M. (303) 135
Al-Maskati, H.A., see El-Din, A.Y.G. (300) 91
Al-Sedairy, S.T., see Waghray, M. (284) 223
Al-Shabanah, O.A.
Inhibition of adriamycin-induced micronuclei by desferrioxamine in Swiss albino mice (301) 107
Albertini, D.F.
Cytoplasmic microtubular dynamics and chromatin organization during mammalian oogenesis and oocyte maturation (296) 57
Albertini, R.J., see Branda, R.F. (285) 269
Albertini, S. and Gocke, E.
Renin inhibitors as an example of presumptive irrelevant positive findings in the Salmonella/mammalian microsome assay (Ames test) (298) 237
Albertini, S., see Chételat, A. (298) 139
Albertini, S., see Chételat, A. (292) 241
Aldridge, K.E., see Beare, D.M. (291) 207
Aleixandre, V., see Herrera, G. (301) 1
Alexandrie, A.K., see Carstensen, U. (289) 187
Aliyakparova, L.M., see Vorobtsova, I.E. (287) 207
Altschuler, M., see Ashraf, M. (302) 75
Altshuler, M.
Recovery of DNA replication in UV-damaged *Escherichia coli* (294) 91
Alvarez, S., see Carballo, M. (288) 215
Amacher, D.E., Ellis Jr., J.H., Joyce, A.J., Muehlbauer, P.A., Turner, G.N., Wahrenburg, M.G., Holden, H.E. and Ray, V.A.
Preclinical toxicology studies with azithromycin: genetic toxicology evaluation (300) 79
Amiel, A., see Joseph-Lerner, N. (300) 247
Amundson, S.A., Fortunato, J.E. and Liber, H.L.
Heritable alterations at the adenine phosphoribosyltransferase (APRT) locus in human lymphoblastoid cell lines (284) 287
Amundson, S.A., Xia, F., Wolfson, K. and Liber, H.L.
Different cytotoxic and mutagenic responses induced by X-rays in two human lymphoblastoid cell lines derived from a single donor (286) 233
Amutan, M.V., see Fowler, R.G. (284) 307
An, J. and Hsie, A.W.
Polymerase chain reaction-based deletion screening of bléomycin induced 6-thioguanine-resistant mutants in Chinese hamster ovary cells: The effects of an inhibitor and a mimic of superoxide dismutase (289) 215
An, J., see Ma, H. (298) 219
Anderson, D., see Davies, M.J. (291) 117
Anderson, D., see Edwards, A.J. (289) 139
Anderson, M., see Pienkowska, M. (288) 123
Anderson, M.W., see Jiao, J. (301) 27
Anderson, R., see Van Staden, A.M. (288) 257
Anderson, R.D., Bao, C.-Y., Minnick, D.T., Baxter, J., Veigl, M.L. and Sedwick, W.D.
Sequencing of double-stranded polymerase chain reaction products for mutation analysis (288) 181
Anderson, R.D., Veigl, M.L., Baxter, J. and Sedwick, W.D.
Excision repair reduces doxorubicin-induced genotoxicity (294) 215
Andersson, B., see Bastlová, T. (287) 283
Andersson, H.C.

The spontaneous frequency of chromosomal aberrations and sister-chromatid exchanges in cultured peripheral lymphocytes of a single blood donor sampled more than 200 times (286) 281

Ando, M., Shindo, Y., Fujita, M., Ozawa, S., Yamazoe, Y. and Kato, R.
A new Salmonella tester strain expressing a hamster acetyltransferase shows high sensitivity for arylamines (292) 155

Andrae, U., see Herrera, L.A. (303) 121

André, V., Boissart, C., Lechevrel, M., Gauduchon, P., Le Talaër, J.Y., Lancelot, J.C., Letois, B., Saturnino, C., Rault, S. and Robba, M.
Mutagenicity of nitro- and amino-substituted carbazoles in *Salmonella typhimurium*. I. Monosubstituted derivatives of 9H-carbazole (299) 63

Andreoli, C., see Benigni, R. (297) 281

Andrews, A.W., see Maragos, C.M. (298) 187

Anisimov, V.N. and Osipova, G.Yu.
Life span reduction and carcinogenesis in the progeny of rats exposed neonatally to 5-bromo-2′-deoxyuridine (295) 113

Anisimov, V.N., see Vorobtsova, I.E. (287) 207

Antipenko, Ye.N. and Kogut, N.N.
The experience of mutation rate quantitative evaluation in connection with environmental pollution (based on studies of congenital anomalies in human populations) (289) 145

Antoccia, A., Tanzarella, C., Modesti, D. and Degrassi, F.
Cytokinesis-block micronucleus assay with kinetochore detection in colchicine-treated human fibroblasts (287) 93

Anwar, W.A. and Rosin, M.P.
Reduction in chromosomal damage in schistosomiasis patients after treatment with praziquantel (298) 179

Aoki, K., Nakatsuru, Y., Sakurai, J., Sato, A., Prince Masahito, and Ishikawa, T.
Age dependence of O^6-methylguanine-DNA methyltransferase activity and its depletion after carcinogen treatment in the teleost medaka (*Oryzias latipes*) (293) 225

Aoki, K., see Lee, H. (297) 53

Aoki, T., see Fujie, K. (300) 241

Appel, K.E., see Dahlhaus, M. (285) 297

Araya, J.C., see Mano, H. (290) 303

Arceo, C., see Olvera, O. (301) 201

Archer, M.C., see Bruce, W.R. (290) 111

Arimoto, S., Fukuoka, S., Itome, C., Nakano, H., Rai, H. and Hayatsu, H.
Binding of polycyclic planar mutagens to chlorophyllin resulting in inhibition of the mutagenic activity (287) 293

Arimoto, S., see Hayatsu, H. (290) 79

Armstrong, M.J. and Galloway, S.M.
Micronuclei induced in peripheral blood of Eμ-PIM-1 transgenic mice by chronic oral treatment with 2-acetylaminofluorene or benzene but not with diethylnitrosamine or 1,2-dichloroethane (302) 61

Armstrong, M.J., Galloway, S.M. and Ashby, J.
2,4,6-Trichlorophenol (TCP) induces chromosome breakage and aneuploidy in vitro (303) 101

Ashby, J. and Paton, D.
The influence of chemical structure on the extent and sites of carcinogenesis for 522 rodent carcinogens and 55 different human carcinogen exposures (286) 3

Ashby, J., Brusick, D., Myhr, B.C., Jones, N.J., Parry, J.M., Nesnow, S., Paton, D., Tinwell, H., Rosenkranz, H.S., Curti, S., Gilman, D. and Callander, R.D.
Correlation of carcinogenic potency with mouse-skin ^{32}P-postlabeling and Muta-^{R}Mouse lac Z^{-} mutation data for DMBA and its K-region sulphur isostere: comparison with activities observed in standard genotoxicity assays (292) 25

Ashby, J., Vogel, E.W., Tinwell, H., Callander, R.D. and Shuker, D.E.G.
Mutagenicity to Salmonella, Drosophila and the mouse bone marrow of the human antineoplastic agent fotemustine: Prediction of carcinogenic potency (286) 101

Ashby, J.
Precedents or possibilities: which should guide the harmonization of mutagenicity test protocols and carcinogen prediction strategies? (298) 291

Ashby, J.
Treosulphan, myleran and butadiene: similarities and differences (300) 77

Ashby, J., see Armstrong, M.J. (303) 101

Ashraf, M., Altschuler, M., Galasinski, S. and Griffiths, T.D.
Alteration of gene expression by restriction enzymes electroporated into plant cells (302) 75

Aslam, M. and Rahman, Q.
Cytotoxic and genotoxic effects of calcium silicates on human lymphocytes in vitro (300) 45

Assum, G., see Motejlek, K. (293) 205

Athwal, R.S., see Mori, T. (293) 143

Au, W.W., Morris, D.L. and Legator, M.S.
Evaluation of the clastogenic effects of 2-methoxyethanol in mice (300) 273

Au, W.W., see Heo, M.Y. (284) 243

Au, W.W., see Ma, H. (298) 219

Auletta, A., see Tucker, J.D. (297) 101

Auletta, A.E., see Cimino, M.C. (297) 97

Aurias, A., see Richard, F. (295) 71

Averbeck, D., Polasa, K., Buisson, J.-P., Bensasson, R., Rougée, M., Cadet, J., Ravanat, J.-L., Perin, F., Vigny, P. and Demerseman, P.
Photobiological activities of 1,6-dioxapyrene in pro- and eukaryotic cells (287) 165

Baan, R.A., see Van Loon, A.A.W.M. (294) 139

Baguley, B.C., see Ferguson, L.R. (285) 79

Baguley, B.C., see Ferguson, L.R. (289) 157

Bagwe, A.N. and Bhisey, R.A.
Occupational exposure to tobacco and resultant genotoxicity in bidi industry workers (299) 103

Bai, Y. and Chen, D.
Accumulative effect of two low doses of irradiation in inducing an adaptive response in human lymphocytes (302) 191

Baker, R.S.U., see Steinel, H.H. (285) 19

Baker, T.I., see Cheng, R. (294) 223

Bala, S., see Grover, I.S. (300) 1

Balajee, A.S. and Natarajan, A.T.
Restriction endonucleases *do* induce sister-chromatid exchanges in Chinese hamster ovary cells (302) 25
Balaji, M. and Sasikala, K.
Cytogenetic effect of malathion in in vitro culture of human peripheral blood (301) 13
Balbinder, E., Coll, B., Hutchinson, J., Bianchi, A.S., Groman, T., Wheeler, K.A. and Meyer, M.
Participation of the SOS system in producing deletions in *E. coli* plasmids (286) 253
Balbinder, E.
Multiple pathways of deletion formation in *Escherichia coli* (299) 193
Balbinder, E., see Levy, M.S. (293) 241
Baleux, C., see Gennart, J.P. (299) 55
Ball, L.M., see Newcomb, K.O. (287) 181
Ballering, L.A.P., Nivard, M.J.M. and Vogel, E.W.
Characterization of the genotoxic action of three structurally related 1,2-dihaloalkanes in *Drosophila melanogaster* (285) 211
Banáth, J.P., see Olive, P.L. (294) 275
Banks, G., see Caldecott, K. (293) 259
Bao, C.-Y., see Anderson, R.D. (288) 181
Barale, R., Scapoli, C., Meli, C., Casini, D., Minunni, M., Marrazzini, A., Loprieno, N. and Barrai, I.
Cytogenetic effects of benzimidazoles in mouse bone marrow (300) 15
Barale, R., see Betti, C. (301) 267
Barbé, J., see Pueyo, M. (293) 21
Barnett, L.B., see Lewis, S.E. (296) 129
Barquinero, J.F., Barrios, L., Caballín, M.R., Miró, R., Ribas, M., Subias, A. and Egozcue, J.
Cytogenetic analysis of lymphocytes from hospital workers occupationally exposed to low levels of ionizing radiation (286) 275
Barrai, I., see Barale, R. (300) 15
Barrios, L., see Barquinero, J.F. (286) 275
Bassani, B., see Leopardi, P. (287) 119
Bassi, L., see Palitti, F. (285) 283
Bastlová, T., Andersson, B., Lambert, B. and Kolman, A.
Molecular analysis of ethylene oxide-induced mutations at the HPRT locus in human diploid fibroblasts (287) 283
Baud-Grasset, F., see Baud-Grasset, S. (303) 77
Baud-Grasset, S., Baud-Grasset, F., Bifulco, J.M., Meier, J.R. and Ma, T.-H.
Reduction of genotoxicity of a creosote-contaminated soil after fungal treatment determined by the Tradescantia–micronucleus test (303) 77
Bautista, A.R.P.L., see Ribeiro, L.R. (300) 253
Baxter, J., see Anderson, R.D. (288) 181
Baxter, J., see Anderson, R.D. (294) 215
Bayley, J.M., see Blakey, D.H. (298) 1
Bean, C.L. and Galloway, S.M.
Evaluation of the need for a late harvest time in the assay for chromosome aberrations in Chinese hamster ovary cells (292) 3
Beare, D., see Steingrimsdottir, H. (294) 29
Beare, D.M., Aldridge, K.E., O'Donovan, M.R. and Cole, J.
An improved procedure for the in vitro expansion of human T-lymphocyte clones for mutant analysis (291) 207
Becher, R., Låg, M., Schwarze, P.E., Brunborg, G., Søderlund, E.J. and Holme, J.A.
Chemically induced DNA damage in isolated rabbit lung cells (285) 305
Beketić-Orešković, L., see Osmak, M. (303) 113
Ben-Nun, I., see Joseph-Lerner, N. (300) 247
Benamira, M. and Marnett, L.J.
The lipid peroxidation product 4-hydroxynonenal is a potent inducer of the SOS response (293) 1
Benford, D.J., see Lawrence, J.N. (291) 105
Benigni, R. and Andreoli, C.
Rodent carcinogenicity and toxicity, in vitro mutagenicity, and their physical chemical determinants (297) 281
Benitez, L., see Espinosa-Aguirre, J.J. (300) 151
Bensasson, R., see Averbeck, D. (287) 165
Benvenuto, F., see Martelli, A. (292) 63
Berghella, L., see Degrassi, F. (288) 263
Bernstein, L., see Gold, L.S. (286) 75
Betina, S., Mašek, F. and Kleibl, K.
Enhancement of the *uvrA* gene dosage reduces pyrimidine dimer excision in UV-irradiated *Escherichia coli* (290) 249
Betti, C., Davini, T., He, J. and Barale, R.
Liquid holding effects on methylmercury genotoxicity in human lymphocytes (301) 267
Bhattacharjee, S.B., see Roy (Pal), M. (285) 201
Bhattacharjee, S.B., see Roy (Pal), M. (291) 43
Bhattacharyya, N.P., see Roy (Pal), M. (285) 201
Bhattacharyya, N.P., see Roy (Pal), M. (291) 43
Bhide, S.V., see Lahiri, M. (303) 97
Bhisey, R.A., see Bagwe, A.N. (299) 103
Bhunya, S.P. and Jena, G.B.
Studies on the genotoxicity of monocrotophos, an organophosphate insecticide, in the chick in vivo test system (292) 231
Bianchi, A.S., see Balbinder, E. (286) 253
Bichet, N., see Vian, L. (291) 93
Bifulco, J.M., see Baud-Grasset, S. (303) 77
Bigbee, W.L., see Grant, S.G. (288) 163
Bingham, S., see O'Neill, I. (290) 127
Birdsell, J., see Durand, J. (290) 239
Birkenfeld, T., see Raabe, F. (300) 99
Bishop, J.B., see Sudman, P.D. (296) 143
Blake, B.W., see Gombar, V.K. (302) 7
Blakey, D.H., Bayley, J.M. and Douglas, G.R.
Induction of chromosomal aberrations in Chinese hamster ovary cells by triethyllead acetate (298) 1
Blanco, M., see Herrera, G. (301) 1
Bleicher, F., see Mironov, N.M. (288) 197
Blowers, S.D., see Forster, R. (298) 71
Bockrath, R., Kow, Y.W. and Wallace, S.S.
Chemically altered apurinic sites in ΦX174 DNA give increased mutagenesis in SOS-induced *E. coli* (288) 207
Bockrath, R., see Evans, J. (299) 147
Boes, R. and Obe, G.
Scrape-loading: A simple method to induce chromosomal aberrations with restriction enzymes in CHO cells (292) 225
Bohr, V.A., see Dabholkar, M. (293) 151
Boissart, C., see André, V. (299) 63
Boiteux, S., Yeung, A.T. and Sage, E.

Enzymatic recognition and biological effects of DNA damage induced by 3-carbethoxypsoralen plus UVA (294) 43
Boiteux, S., see Epe, B. (299) 135
Bolognesi, C., Parrini, M., Bonassi, S., Ianello, G. and Salanitto, A.
Cytogenetic analysis of a human population occupationally exposed to pesticides (285) 241
Bolognesi, C., see Scarabelli, L. (302) 1
Bonassi, S., see Bolognesi, C. (285) 241
Bonatti, S., see Ottaggio, L. (301) 149
Bonatti, S., see Taningher, M. (301) 275
Bonin, A.M., see Steinel, H.H. (285) 19
Bonin, T., see Winder, C. (285) 117
Borden, A., see Lawrence, C.W. (299) 157
Bostick-Bruton, F., see Dabholkar, M. (293) 151
Bottema, C.D.K. and Sommer, S.S.
PCR amplification of specific alleles: Rapid detection of known mutations and polymorphisms (288) 93
Bouayadi, K., Villani, G. and Salles, B.
Resistance to cisplatin in an *E. coli* B/r Nal^R mutant (294) 77
Boveris, A., see Carballo, M. (288) 215
Boyd, J.B., see Harris, P.V. (301) 51
Boyd, J.B., see Leonhardt, E.A. (301) 121
Boyes, B.G., see Rogers, C.G. (299) 9
Boyse, J., see Sala-Trepat, M. (289) 115
Brail, L., Fan, E., Levin, D.B. and Logan, D.M.
Improved polymerase fidelity in PCR-SSCPA (303) 171
Brambilla, G., see Martelli, A. (292) 63
Branda, R.F., Sullivan, L.M., O'Neill, J.P., Falta, M.T., Nicklas, J.A., Hirsch, B., Vacek, P.M. and Albertini, R.J.
Measurement of HPRT mutant frequencies in T-lymphocytes from healthy human populations (285) 269
Brandi, G., see Marini, M. (301) 243
Brandriff, B.F. and Gordon, L.A.
Spatial distribution of sperm-derived chromatin in zygotes determined by fluorescence in situ hybridization (296) 33
Brandsma, J.A., see Visse, R. (294) 263
Brás, A., see Rueff, J. (289) 197
Bratt, I., see Carstensen, U. (289) 187
Braun, J.E.F., Wanamarta, A.H., Van den Akker, E., Lafleur, M.V.M. and Retèl, J.
C/G to A/T transversions represent the main type of mutation induced by γ-irradiation in double-stranded M13mp10 DNA in a nitrogen-saturated solution (289) 255
Braun, J.E.F., see Retèl, J. (299) 165
Bravo, M., see Pincheira, J. (295) 55
Brendel, M., see Kunz, B.A. (289) 3
Brendel, M., see Wehner, E. (289) 91
Bridges, B.A.
Spontaneous mutation in stationary-phase *Escherichia coli* WP2 carrying various DNA repair alleles (302) 173
Briley, D., see Moyer, R. (288) 291
Brisebois, J.J. and DuBow, M.S.
Selection for spontaneous null mutations in a chromosomally-integrated HSV-1 thymidine kinase gene yields deletions and a mutation caused by intragenic illegitimate recombination (287) 191
Brockman, H.E., see De Serres, F.J. (285) 145
Bronzetti, G., see Del Carratore, R. (301) 165
Brott, D., see Kirshna, G. (302) 119
Brown, J.L., see Kitchin, K.T. (290) 155
Brown, M.D., Ripley, L.S. and Hall, D.H.
A proflavin-induced frameshift hotspot in the thymidylate synthase gene of bacteriophage T4 (286) 189
Bruce, W.R., Archer, M.C., Corpet, D.E., Medline, A., Minkin, S., Stamp, D., Yin, Y. and Zhang, X.-M.
Diet, aberrant crypt foci and colorectal cancer (290) 111
Brunborg, G., see Becher, R. (285) 305
Brunello, F., see Fracasso, M.E. (298) 91
Brusick, D., see Ashby, J. (292) 25
Brusick, D.J., see Ivett, J.L. (298) 43
Bryant, P.E. and Johnston, P.J.
Restriction-endonuclease-induced DNA double-strand breaks and chromosomal aberrations in mammalian cells (299) 289
Buchet, J.P., see Gennart, J.P. (299) 55
Buchet, J.P., see Van Hummelen, P. (300) 231
Buentello, L., see Palma, V. (286) 267
Buisson, J.-P., see Averbeck, D. (287) 165
Buntenkötter, S., see Zwingelberg, R. (302) 39
Buraczewska, I., see Staron, K. (285) 175
Burgess, W.M., see McKinnon, R.A. (290) 27
Burke, J.F. and Mogg, A.E.
UV-stimulated recombination in mammalian cells is not dependent upon DNA replication (294) 309
Burkhart, B.A., see Burkhart, J.G. (292) 69
Burkhart, J.G., Burkhart, B.A., Sampson, K.S. and Malling, H.V.
ENU-induced mutagenesis at a single A:T base pair in transgenic mice containing ΦX174 (292) 69
Burr, A.H., see Ward, A.J. (294) 299
Burvall, K., Ridanpää, M., Husgafvel-Pursiainen, K. and Önfelt, A.
Separation of transforming N-*ras* mutations in codons 12, 13 and 61 by denaturing gradient gel electrophoresis: investigation based on a set of phagemid constructs (285) 289
Busbee, D., see Srivastava, V.K. (295) 265
Buschini, A., see Poli, P. (298) 113

Caballín, M.R., see Barquinero, J.F. (286) 275
Cabral-Neto, J.B., Gentil, A., Cabral, R.E.C. and Sarasin, A.
Implication of uracil in spontaneous mutagenesis on a single-stranded shuttle vector replicated in mammalian cells (288) 249
Cabral, R.E.C., see Cabral-Neto, J.B. (288) 249
Cadena, S.R., see Madrigal-Bujaidar, E. (300) 135
Cadet, J., see Averbeck, D. (287) 165
Cai, L., Jiang, J., Wang, B., Yao, H. and Wang, X.
Induction of an adaptive response to dominant lethality and to chromosome damage of mouse germ cells by low dose radiation (303) 157
Cain, K.T., see Rutledge, J.C. (296) 167
Caldas, L.R., see Leitão, A.C. (286) 173
Caldecott, K., Banks, G. and Jeggo, P.

The induction and reversal of topoisomerase II cleavable complexes formed by nuclear extract from the CHO DNA repair mutant, *xrs*1 (293) 259
Callander, R.D., see Ashby, J. (286) 101
Callander, R.D., see Ashby, J. (292) 25
Campanini, N., see Poli, P. (298) 113
Campart, G.B., see Martelli, A. (292) 63
Candreva, E.C., see Nunes, E. (289) 165
Cantoni, O., see Marini, M. (301) 243
Caporossi, D., Porfirio, B., Nicoletti, B., Palitti, F., Degrassi, F., De Salvia, R. and Tanzarella, C.
Hypersensitivity of lymphoblastoid lines derived from ataxia telangiectasia patients to the induction of chromosomal aberrations by etoposide (VP-16) (290) 265
Carballo, M., Alvarez, S. and Boveris, A.
Cellular stress by light and Rose Bengal in human lymphocytes (288) 215
Cardoso, J.S., see Leitão, A.C. (286) 173
Cariello, N.F. and Skopek, T.R.
Mutational analysis using denaturing gradient gel electrophoresis and PCR (288) 103
Carrano, A.V., see Tucker, J.D. (297) 101
Carstensen, U., Alexandrie, A.K., Högstedt, B., Rannug, A., Bratt, I. and Hagmar, L.
B- and T-lymphocyte micronuclei in chimney sweeps with respect to genetic polymorphism for *CYP1A1* and *GST1* (class Mu) (289) 187
Carswell, C., see Hoy, C.A. (290) 217
Casciano, D.A., see Aidoo, A. (298) 169
Casciano, D.A., see Shaddock, J.G. (295) 19
Casciano, D.A., see Shaddock, J.G. (301) 261
Casini, D., see Barale, R. (300) 15
Caskey, C.T., see Xu, Z. (288) 237
Caspary, W.J., see Stopper, H. (300) 165
Cassand, P.M., see Michel, X.R. (301) 113
Cassani, M., see Madrigal-Bujaidar, E. (300) 135
Cassoni, F., see Poli, P. (298) 113
Catsoulacos, P., see Tselepi, M.R. (290) 211
Catsoulacos, P., see Voutsinas, G. (298) 261
Cattanach, B.M., see Van der Meer, Y. (290) 201
Cattani, S., see Poli, P. (298) 113
Cavalieri, Z., see Ottaggio, L. (301) 149
Cavolina, P., see Di Leonardo, A. (301) 177
Ceccherini, I., see Steingrimsdottir, H. (294) 29
Celotti, L., Ferraro, P., Furlan, D., Zanesi, N. and Pavanello, S.
DNA repair in human lymphocytes treated in vitro with (±)-anti- and (±)-syn-benzo[*a*]pyrene diolepoxide (294) 117
Cerutti, P., see Pourzand, C. (288) 113
Cesarone, C.F., see Scarabelli, L. (302) 1
Chadwick, K.H. and Leenhouts, H.P.
Response to the paper 'Biological low-dose radiation effects' (298) 141
Chakrabarti, S., see Zhang, X.-X. (302) 213
Chakraborty, P.K., see Hooberman, B.H. (299) 85
Chambers, R.W.
Site-directed mutagenesis in single cells: Transitions produced by DNA carrying a single O^6-alkylguanine residue (299) 123
Chang, H.-Y., see Wang, T.-C.V. (294) 157
Chang, J., Watson, W.P., Randerath, E. and Randerath, K.
Bulky DNA-adduct formation induced by Ni(II) in vitro and in vivo as assayed by ^{32}P-postlabeling (291) 147
Chao, C.C.-K. and Huang, S.-L.
Apparent alterations in the early stage of excision repair of UV-induced DNA damages in a HeLa mutant cell line that is resistant to genotoxic stresses (303) 19
Chapin, R.E., see Kligerman, A.D. (300) 125
Chappel, C.I., see Ivett, J.L. (298) 43
Chatterjee, A. and J.-Raman, M.
Protective effect of cysteine against X-ray- and bleomycin-induced chromosomal aberrations and cell cycle delay (290) 231
Chen, D., see Bai, Y. (302) 191
Chen, D.J., see Warters, R.L. (293) 91
Chen, J., Sahota, A., Martin, G.F., Hakoda, M., Kamatani, N., Stambrook, P.J. and Tischfield, J.A.
Analysis of germline and in vivo somatic mutations in the human adenine phosphoribosyltransferase gene: Mutational hot spots at the intron 4 splice donor site and at codon 87 (287) 217
Chen, P., Kidson, C. and Lavin, M.
Evidence of different complementation groups amongst human genetic disorders characterized by radiosensitivity (285) 69
Chen, Q.Y., see Herrera, L.A. (303) 121
Chen, R., see Sinsheimer, J.E. (298) 197
Chen, S., see Manjgaladze, M. (295) 201
Chen, T.D., see Qu, Y.H. (298) 105
Chen, W., Lin, J.-M., Reinhart, L. and Weisburger, J.H.
Mutagenic peroxides in diethyl ether (287) 227
Cheng, R., Baker, T.I., Cords, C.E. and Radloff, R.J.
mei-3, a recombination and repair gene of *Neurospora crassa*, encodes a RecA-like protein (294) 223
Chételat, A., Albertini, S. and Gocke, E.
Alleged in vivo genotoxicity of paracetamol and green S (298) 139
Chételat, A., Albertini, S., Dresp, J.H., Strobel, R. and Gocke, E.
Photomutagenesis test development: I. 8-Methoxypsoralen, chlorpromazine and sunscreen compounds in bacterial and yeast assays (292) 241
Chételat, A., Dresp, J.H. and Gocke, E.
Photomutagenesis test development: II. 8-Methoxypsoralen, chlorpromazine and sunscreen compounds in chromosomal aberration assays using CHO cells (292) 251
Chipman, J.K., see Davies, J.E. (287) 157
Chiricolo, M., Musa, A.R., Monti, D., Zannotti, M. and Franceschi, C.
Enhanced DNA repair in lymphocytes of Down syndrome patients: the influence of zinc nutritional supplementation (295) 105
Chorvatovičová, D., Kováčiková, Z., Šandula, J. and Navarová, J.
Protective effect of sulfoethylglucan against hexavalent chromium (302) 207
Chou, M.W., Kong, J., Chung, K.-T. and Hart, R.W.
Effect of caloric restriction on the metabolic activation of xenobiotics (295) 223

Chou, M.W., see Shaddock, J.G. (295) 19
Chou, M.W., see Shaddock, J.G. (301) 261
Chou, W.-G., see Zhu, W. (294) 101
Choy, W.N.
A review of the dose–response induction of DNA adducts by aflatoxin B_1 and its implications to quantitative cancer-risk assessment (296) 181
Christie, N.T., see Coogan, T.P. (293) 39
Chu, E.H.Y., see Das, L. (299) 19
Chu, K.-C., see Ma, T.-H. (303) 35
Chung, K.-T., see Chou, M.W. (295) 223
Ciaravino, V., Suto, M.J. and Theiss, J.C.
High capacity in vitro micronucleus assay for assessment of chromosome damage: results with quinolone/naphthyridone antibacterials (298) 227
Cimino, M.C. and Auletta, A.E.
Availability of the GENE-TOX database on the National Library of Medicine TOXNET System (297) 97
Cimino, M.C., see Tucker, J.D. (297) 101
Cinelli, S., see Forster, R. (298) 71
Citti, L., see Vatteroni, L. (291) 163
Clark, A.M., see Sanderson, B.J.S. (285) 27
Cleaver, J.E., see Lutze, L.H. (299) 225
Cliet, I., Melcion, C. and Cordier, A.
Lack of predictivity of bone marrow micronucleus test versus testis micronucleus test: comparison with four carcinogens (292) 105
Coffin, J., see Rinchik, E.M. (286) 199
Colbert, B., see Knasmüller, S. (299) 45
Cole, J., see Beare, D.M. (291) 207
Cole, J., see Steingrimsdottir, H. (294) 29
Coll, B., see Balbinder, E. (286) 253
Collins, A., see McKelvey-Martin, V.J. (288) 47
Collins, A.R.
Mutant rodent cell lines sensitive to ultraviolet light, ionizing radiation and cross-linking agents: a comprehensive survey of genetic and biochemical characteristics (293) 99
Conley, E.C.
Mechanism and genetic control of recombination in bacteria (284) 75
Coogan, T.P., Motz, J. and Christie, N.T.
Repair of X-ray induced DNA strand damage by isolated rat splenic lymphocytes (293) 39
Cordier, A., see Cliet, I. (292) 105
Cords, C.E., see Cheng, R. (294) 223
Corpet, D.E., see Bruce, W.R. (290) 111
Cortés, F., Piñero, J. and Ortiz, T.
Importance of replication fork progression for the induction of chromosome damage and SCE by inhibitors of DNA topoisomerases (303) 71
Cortés, F., Piñero, J. and Palitti, F.
Cytogenetic effects of inhibition of topoisomerase I or II activities in the CHO mutant EM9 and its parental line AA8 (288) 281
Cortés, F., see Domínguez, I. (301) 135
Cortés, F., see Palitti, F. (285) 283
Cortés, F., see Piñero, J. (292) 205
Cortez, D., see Seo, K.-Y. (299) 111
Costa, M., see Kargacin, B. (300) 63
Costa, S.L., see Ribeiro, L.R. (300) 253
Cotton, R.G.H.
Current methods of mutation detection (285) 125
Cotton, R.G.H., see Smooker, P.M. (288) 65
Courcelle, J., see Evans, J. (299) 147
Couturier, J., see Richard, F. (295) 71
Coviello, A.M.R., see Scarfì, M.R. (289) 291
Cox, B., see McCready, S. (293) 233
Cozzi, R., Nicolai, M., Perticone, P., De Salvia, R. and Spuntarelli, F.
Desmutagenic activity of natural humic acids: inhibition of mitomycin C and maleic hydrazide mutagenicity (299) 37
Crechet, F., see Sabatier, L. (284) 257
Creppy, E.E., see Pfohl-Leszkowicz, A. (289) 265
Crisp, T.M.
Organization of the ovarian follicle and events in its biology: oogenesis, ovulation or atresia (296) 89
Crissey, M.A., see Masker, W. (301) 235
Cristóvão, L., see Rueff, J. (289) 197
Crouse, E.W., see Lake, R.S. (301) 157
Cruces, M., see Olvera, O. (301) 201
Crutzen, M.-C., see Duverger-van Bogaert, M. (292) 199
Curry, J., Skandalis, A., Holcroft, J., De Boer, J. and Glickman, B.
Coamplification of *hprt* cDNA and γ T-cell receptor sequences from 6-thioguanine resistant human T-lymphocytes (288) 269
Curry, J.D., see De Boer, J.G. (288) 173
Curti, S., see Ashby, J. (292) 25
Cuzick, J., see King, M.M. (292) 113
Czeizel, A.E.
Intrauterine growth retardation as a potential endpoint in mutation epidemiology (296) 211
Czeizel, A.E., see Van Bao, T. (298) 131

Dabholkar, M., Bostick-Bruton, F., Weber, C., Egwuagu, C., Bohr, V.A. and Reed, E.
Expression of excision repair genes in non-malignant bone marrow from cancer patients (293) 151
Dahlhaus, M. and Appel, K.E.
N-Nitrosodimethylamine, *N*-nitrosodiethylamine, and *N*-nitrosomorpholine fail to generate 8-hydroxy-2′-deoxyguanosine in liver DNA of male F344 rats (285) 297
Dai, G., see Shadley, J.D. (301) 171
Dairi, M.G., see El-Din, A.Y.G. (300) 91
Danna, T.F., see Randerath, K. (295) 31
Darroudi, F., see Natarajan, A.T. (299) 297
Das, B.C., see D'Souza, D. (284) 251
Das, L., Das, S.K., Chu, E.H.Y. and Sinsheimer, J.E.
Chromosomal aberrations in mouse lymphocytes exposed in vivo and in vitro to aliphatic epoxides (299) 19
Das, S.K., see Das, L. (299) 19
Das, S.K., see Sinsheimer, J.E. (298) 197
Davies, J.E., Mynett, K., Gescher, A. and Chipman, J.K.
DNA modification and repair by 2-nitropropane is extensive in hepatocytes of rats compared to those of humans and mice (287) 157
Davies, M.J., Phillips, B.J. and Rumsby, P.C.
Molecular analysis of mutations at the *tk* locus of L5178Y

mouse-lymphoma cells induced by ethyl methanesulphonate and mitomycin C (290) 145
Davies, M.J., Phillips, B.J., Anderson, D. and Rumsby, P.C.
Molecular analysis of mutation at the *hprt* locus of Chinese hamster V79 cells induced by ethyl methanesulphonate and mitomycin C (291) 117
Davini, T., see Betti, C. (301) 267
Day III, R.S.
Deoxyguanosine reverses inhibition by hydroxyurea of repair of UV-irradiated adenovirus 5 (293) 215
De Andreis, C., see Salvi, R. (291) 213
Dearfield, K.L., Harrington-Brock, K., Doerr, C.L., Parker, L. and Moore, M.M.
Genotoxicity of three pyridine compounds to L5178Y mouse lymphoma cells (301) 57
Dearfield, K.L., Stack, H.F., Quest, J.A., Whiting, R.J. and Waters, M.D.
A survey of EPA/OPP and open literature data on selected pesticide chemicals tested for mutagenicity. I. Introduction and first ten chemicals (297) 197
Dearfield, K.L., see Tucker, J.D. (297) 101
De Boer, J., see Curry, J. (288) 269
De Boer, J.G., Curry, J.D. and Glickman, B.W.
A fast and simple method to determine the clonal relationship among human T-cell lymphocytes (288) 173
Decaris, B., see Volff, J.-N. (287) 141
De Cock, J.G.R., Klink, E.C., Ferro, W., Lohman, P.H.M. and Eeken, J.C.J.
Neither enhanced removal of cyclobutane pyrimidine dimers nor strand-specific repair is found after transcription induction of the β_3-*tubulin* gene in a Drosophila embryonic cell line *Kc* (293) 11
De Flora, S.
First Annual Meeting of the Italian Section of the European Environmental Mutagen Society (SIMA) (291) 217
Degrassi, F., De Salvia, R. and Berghella, L.
The production of chromosomal alterations by β-lapachone, an activator of topoisomerase I (288) 263
Degrassi, F., see Antoccia, A. (287) 93
Degrassi, F., see Caporossi, D. (290) 265
De Kok, T.M.C.M., Van Iersel, M.L.P.S., Ten Hoor, F. and Kleinjans, J.C.S.
In vitro study on the effects of fecal composition on fecapentaene kinetics in the large bowel (302) 103
Del Carratore, R., Morichetti, E., Galli, A., Galeotti, C. and Bronzetti, G.
Inhibition of yeast cytochrome P-450 by ammonium metavanadate (301) 165
Del Porto, G., see Grammatico, P. (300) 119
DeLuca, J.G., see Elia, M.C. (291) 193
Demakov, V.A., see Oktyabrsky, O.N. (293) 197
De Méo, M.P., see McKelvey-Martin, V.J. (288) 47
Demerseman, P., see Averbeck, D. (287) 165
De Meyer, R., see Gennart, J.P. (299) 55
De Meyer, R., see Masumbuko, M.B. (303) 45
Demopoulos, N.A., see Tselepi, M.R. (290) 211
Demopoulos, N.A., see Voutsinas, G. (298) 261
Dempsey, J.L., Odagiri, Y. and Morley, A.A.
In vivo mutations at the H-2 locus in mouse lymphocytes (285) 45
Dempsey, J.L., Pfeiffer, M. and Morley, A.A.
Effect of dietary restriction on in vivo somatic mutation in mice (291) 141
De Peyster, A. and Wang, Y.Y.
Genetic toxicity studies of gossypol (297) 293
De Rooij, D.G., see Tegelenbosch, R.A.J. (290) 193
De Rooij, D.G., see Van der Meer, Y. (290) 201
Dertinger, S.D., see Tometsko, A.M. (292) 129
Dertinger, S.D., see Tometsko, A.M. (292) 137
Dertinger, S.D., see Tometsko, A.M. (292) 145
De Ruijter, M., see Visse, R. (294) 263
De Salvia, R., see Caporossi, D. (290) 265
De Salvia, R., see Cozzi, R. (299) 37
De Salvia, R., see Degrassi, F. (288) 263
De Serres, F.J. and Brockman, H.E.
Comparison of the spectra of genetic damage in N^4-hydroxycytidine-induced *ad-3* mutations between nucleotide excision repair-proficient and -deficient heterokaryons of *Neurospora crassa* (285) 145
Deutsch, J.C. and Kolhouse, J.F.
A mechanism of inhibition of short-wavelength ultraviolet light-induced deamination of pyrimidine bases by ascorbic acid (302) 183
Dewey, W.C., see Krishnaswamy, G. (293) 161
Dey, S.K., see Roy (Pal), M. (285) 201
Dey, S.K., see Roy (Pal), M. (291) 43
Dianovský, J., see Šiviková, K. (290) 311
Di Berardino, D., see Scarfì, M.R. (289) 291
Di Chiara, D., see Palitti, F. (285) 283
Dierickx, P.J., see Duverger-van Bogaert, M. (292) 199
Dietrich, F., see McCann, J. (297) 61
Di Leonardo, A., Cavolina, P. and Maddalena, A.
DNA topoisomerase II inhibition and gene amplification in V79/B7 cells (301) 177
Dirheimer, G., see Pfohl-Leszkowicz, A. (289) 265
Dirscherl, L.A., see Patierno, S.R. (300) 179
Di Sibio, A., see Sbrana, I. (287) 57
Djuric, Z. and Kritschevsky, D.
Modulation of oxidative DNA damage levels by dietary fat and calories (295) 181
Doerr, C.L., see Dearfield, K.L. (301) 57
Domínguez, I., Panneerselvam, N., Escalza, P., Natarajan, A.T. and Cortés, F.
Adaptive response to radiation damage in human lymphocytes conditioned with hydrogen peroxide as measured by the cytokinesis-block micronucleus technique (301) 135
Domracheva, E.V., see Verschaeve, L. (287) 253
Dong, J.-T. and Luo, X.-M.
Arsenic-induced DNA-strand breaks associated with DNA–protein crosslinks in human fetal lung fibroblasts (302) 97
Dorigo, E., see Russo, A. (287) 275
Douglas, G.R., see Blakey, D.H. (298) 1
Dresp, J.H., see Chételat, A. (292) 241
Dresp, J.H., see Chételat, A. (292) 251
Drobetsky, E.A. and Sage, E.
UV-induced G:C → A:T transitions at the APRT locus of Chinese hamster ovary cells cluster at frequently damaged 5′-TCC-3′ sequences (289) 131
Drouin, R., see Pfeifer, G.P. (288) 39

D'Souza, D., Thomas, I.M. and Das, B.C.
Effect of inhibitor of poly (ADP-ribose) polymerase in blood lymphocyte cultures of untreated leprosy patients (284) 251
DuBow, M.S., see Brisebois, J.J. (287) 191
DuBow, M.S., see Fouquet, C. (284) 321
Duffy, P.H., see Manjgaladze, M. (295) 201
Duffy, P.H., see Turturro, A. (295) 151
Duivenvoorden, W.C.M., see Natarajan, A.T. (287) 47
Duker, N.J., see Ganguly, T. (293) 71
Durand, J., Birdsell, J. and Wills, C.
Pleiotropic effects of heterozygosity at the mating-type locus of the yeast *Saccharomyces cerevisiae* on repair, recombination and transformation (290) 239
Dutrillaux, A.-M., see Richard, F. (295) 71
Dutrillaux, B., see Martins, M.B. (285) 231
Dutrillaux, B., see Richard, F. (295) 71
Dutrillaux, B., see Sabatier, L. (284) 257
Duverger-van Bogaert, M., Dierickx, P.J., Stecca, C. and Crutzen, M.-C.
Metabolic activation by a supernatant from human hepatoma cells: a possible alternative in mutagenic tests (292) 199
Dycaico, M.J., see Provost, G.S. (288) 133

Eckardt-Schupp, F. and Ahne, F.
Bridge-building between mathematical theory and molecular biology: The *REV2* gene as paradigm (289) 39
Eckardt-Schupp, F., see Kunz, B.A. (289) 3
Eckl, P.M., Ortner, A. and Esterbauer, H.
Genotoxic properties of 4-hydroxyalkenals and analogous aldehydes (290) 183
Eckl, P.M., see Reisenbichler, H. (286) 135
Eden, O.B., see Slavotinek, A. (303) 11
Edenharder, R., Von Petersdorff, I. and Rauscher, R.
Antimutagenic effects of flavonoids, chalcones and structurally related compounds on the activity of 2-amino-3-methylimidazo[4,5-*f*]quinoline (IQ) and other heterocyclic amine mutagens from cooked food (287) 261
Edu, D.A., see Villaseñor, I.M. (298) 215
Edwards, A.J., Moon, E.Y., Anderson, D. and McGregor, D.B.
The effect of simultaneous exposure to bromodeoxyuridine and methyl methanesulphonate on sister-chromatid exchange frequency in cultured human lymphocytes (289) 139
Eeken, J.C.J., see De Cock, J.G.R. (293) 11
Eeken, J.C.J., see Ferro, W. (285) 315
Efstathiou, E., see Fautz, R. (291) 21
Egozcue, J., see Barquinero, J.F. (286) 275
Egwuagu, C., see Dabholkar, M. (293) 151
Ehrenberg, L., see Farooqi, Z. (288) 223
Ehrenberg, L., see Granath, F. (284) 297
Eilertsen, E., see Kristensen, P. (302) 33
Einarsdóttir, E., see Kristensen, P. (302) 33
Einspenner, M., see Waghray, M. (284) 223
El-Din, A.Y.G., Al-Maskati, H.A., Mohamed, A.Y.A. and Dairi, M.G.
Acrylamide as an inducer of metabolic activation system (S9) in rats (300) 91
El-Nahas, S.M., Mattar, F.E. and Mohamed, A.A.
Radioprotective effect of vitamins C and E (301) 143
Elespuru, R.K., see Maragos, C.M. (298) 187
Elia, M.C., Storer, R.D., Harmon, L.S., Kraynak, A.R., McKelvey, T.W., Hertzog, P.R., Keenan, K.P., DeLuca, J.G. and Nichols, W.W.
Cytotoxicity as measured by trypan blue as a potentially confounding variable in the in vitro alkaline elution/rat hepatocyte assay (291) 193
Eling, T.E., see Morrison, L.D. (302) 45
Ellard, S. and Parry, E.M.
Induction of micronuclei in V79 Chinese hamster cells by hydroquinone and econazole nitrate (287) 87
Ellis Jr., J.H., see Amacher, D.E. (300) 79
Ellul, A., see O'Neill, I. (290) 127
Emura, M., see Peiser, C. (289) 281
Endo, O., see Matsushita Jr., H. (301) 213
Engelhardt, G. and Fleig, H.
1-Methyl-2-pyrrolidinone (NMP) does not induce structural and numerical chromosomal aberrations in vivo (298) 149
Engström, K., see Lähdetie, J. (300) 37
Enslein, K. see Gombar, V.K. (302) 7
Epe, B., Pflaum, M. and Boiteux, S.
DNA damage induced by photosensitizers in cellular and cell-free systems (299) 135
Erdinger, L., Schmezer, P., Razdan, R., Kumar, R., Spiegelhalder, B., Preussmann, R. and Siddiqi, M.
Caffeine-derived *N*-nitroso compounds. III: Mutagenicity in *S. typhimurium* and in vitro induction of DNA single-strand breaks in rat hepatocytes by mononitrosocaffeidine and dinitrosocaffeidine (292) 41
Erexson, G.L., see Kligerman, A.D. (300) 125
Escalza, P., see Domínguez, I. (301) 135
Espinosa-Aguirre, J.J., Reyes, R.E., Rubio, J., Ostrosky-Wegman, P. and Martinez, G.
Mutagenic activity of urban air samples and its modulation by chili extracts (303) 55
Espinosa-Aguirre, J.J., Vilchis, C., Ostrosky-Wegman, P., Benitez, L., Lares, I. and Rubio, J.
Antimutagenicity of cyclohexanol towards 4-(*N*-nitrosomethylamino)-1-(3-pyridyl)-1-butanone and *N*-nitrosodiethylamine in *Salmonella typhimurium* strain TA100 (300) 151
Esterbauer, H., see Eckl, P.M. (290) 183
Evans, J., Maccabee, M., Hatahet, Z., Courcelle, J., Bockrath, R., Ide, H. and Wallace, S.
Thymine ring saturation and fragmentation products: lesion bypass, misinsertion and implications for mutagenesis (299) 147
Eynaud, P., see Slavotinek, A. (303) 11

Fahrig, R.
Co-recombinagenic effects (284) 185
Fahrig, R.
Tests for recombinagens in mammals in vivo (284) 177
Fält, S., see Holmberg, K. (286) 321

Falta, M.T., see Branda, R.F. (285) 269
Fan, E., Levin, D.B., Glickman, B.W. and Logan, D.M.
Limitations in the use of SSCP analysis (288) 85
Fan, E., see Brail, L. (303) 171
Farooqi, Z. and Kesavan, P.C.
Low-dose radiation-induced adaptive response in bone marrow cells of mice (302) 83
Farooqi, Z., Törnqvist, M., Ehrenberg, L. and Natarajan, A.T.
Genotoxic effects of ethylene oxide and propylene oxide in mouse bone marrow cells (288) 223
Fautz, R., Husein, B., Efstathiou, E. and Hechenberger-Freudl, C.
Assessment of the relation between the initial viability and the attachment of freshly isolated rat hepatocytes used for the in vivo/in vitro DNA repair assay (UDS) (291) 21
Favor, J. and Morawetz, C.
Insertional mutations in mammals and mammalian cells (284) 53
Fedyk, J., see Henderson, L. (291) 79
Feeney, L., see Wolff, S. (289) 107
Feige, M., see Kiefer, J. (299) 219
Fejgin, M., see Joseph-Lerner, N. (300) 247
Felton, J.S., see Tucker, J.D. (301) 19
Fenech, M.
Mouse and human micronucleus models for assessing genotoxicity of whole foods in intervention studies (290) 119
Fenech, M.
The cytokinesis-block micronucleus technique: A detailed description of the method and its application to genotoxicity studies in human populations (285) 35
Ferguson, L.R. and Baguley, B.C.
Multidrug resistance and mutagenesis (285) 79
Ferguson, L.R., Morcombe, P. and Triggs, C.N.
The size of cytokinesis-blocked micronuclei in human peripheral blood lymphocytes as a measure of aneuploidy induction by Set A compounds in the EEC trial (287) 101
Ferguson, L.R., Turner, P.M. and Baguley, B.C.
Induction of mitotic crossing-over by the topoisomerase II poison DACA (*N*-[2-dimethylamino)ethyl]acridine-4-carboxamide) in *Saccharomyces cerevisiae* (289) 157
Ferguson, L.R.
Diet and the prevention of colorectal cancer (290) 139
Ferguson, L.R.
Introduction (290) 1
Ferguson, L.R., see Harris, P.J. (290) 97
Ferguson, L.R., see Munday, R. (302) 71
Fernandez, M. and L'Haridon, J.
Influence of lighting conditions on toxicity and genotoxicity of various PAH in the newt in vivo (298) 31
Fernandez, M., L'Haridon, J., Gauthier, L. and Zoll-Moreux, C.
Amphibian micronucleus test(s): a simple and reliable method for evaluating in vivo genotoxic effects of freshwater pollutants and radiations. Initial assessment (292) 83
Ferraro, P., see Celotti, L. (294) 117
Ferreira, A., see Pienkowska, M. (288) 123
Ferro, W. and Eeken, J.C.J.
Studies on mutagen sensitive strains of *Drosophila melanogaster*. XI. Survival (dominant lethality) after X-irradiation and relation to recessive lethals and translocations (285) 315
Ferro, W., see De Cock, J.G.R. (293) 11
Feuers, R.J., Weindruch, R. and Hart, R.W.
Caloric restriction, aging, and antioxidant enzymes (295) 191
Feuers, R.J., see Manjgaladze, M. (295) 201
Feuers, R.J., see Shaddock, J.G. (295) 19
Feuers, R.J., see Shaddock, J.G. (301) 261
Fijalkowska, I.J., see Oller, A.R. (292) 175
Finch, C.E., see Randerath, K. (295) 11
Finlay, G.J.
Genetics, molecular biology and colorectal cancer (290) 3
Fiore, M., see Palitti, F. (285) 283
Fissler, B., see Seelbach, A. (303) 163
Fitt, P.S. and Sharma, N.
The effect of non-mutagenic stress on liquid holding recovery in *Escherichia coli* AB2463 (302) 53
Fix, D.
N-Ethyl-*N*-nitrosourea-induced mutagenesis in *Escherichia coli*: Multiple roles for UmuC protein (294) 127
Fix, D.
The *rex* genes of lambda prophage modify ultraviolet light and *N*-methyl-*N*-nitrosourea-induced responses to DNA damage in *Escherichia coli* (303) 143
Fleig, H., see Engelhardt, G. (298) 149
Flüry-Hérard, A., see Richard, F. (295) 71
Folle, G.A., see Obe, G. (299) 305
Foresti, M., Gaudio, L., Paoletti, I. and Geraci, G.
Inhibition of erythroid differentiation in MEL cells by UV irradiation. Cell cycle and DNA repair activity (294) 69
Forster, R., Blowers, S.D., Cinelli, S., Marquardt, H. and Westendorf, J.
Mutagenicity testing of imidazole and related compounds (298) 71
Fort, F.L., see Fujikawa, K. (290) 175
Fort, F.L., see Nakamura, M. (291) 29
Fortunato, J.E., see Amundson, S.A. (284) 287
Fouquet, C. and DuBow, M.S.
Effect of *cis*-located human satellite DNA on the electroporation efficiency of *neo* and HSV-1 *tk* containing plasmids (284) 321
Fowler, R.G., Amutan, M.V. and Isbell, R.J.
The interaction of the *Escherichia coli mutD* and *mutT* pathways in the prevention of A:T → C:G transversions (284) 307
Fowler, R.G., see Krishnaswamy, S. (288) 311
Frabetti, F., see Marini, M. (301) 243
Fracasso, M.E., Leone, R., Brunello, F., Monastra, C., Tezza, F. and Storti, P.V.
Mutagenic activity in wastewater concentrates from dye plants (298) 91
Frame, L.T., see Manjgaladze, M. (295) 201
Franceschi, C., see Chiricolo, M. (295) 105
Frank, H., see Krämer, A. (290) 165
Frankel, W.N., see Rinchik, E.M. (286) 199
Fresu, A.M., see Martelli, A. (292) 63
Freund, M.M., see Masumbuko, M.B. (303) 45

Friedberg, E.C. and Henning, K.A.
The conundrum of xeroderma pigmentosum — A rare disease with frequent complexities (289) 47
Froines, J.R., see La, D.K. (301) 79
Fryxell, K.J. and Kumar, J.P.
Characterization of the radiation-sensitive stage in the development of the compound eye of Drosophila (285) 183
Fujie, K., Aoki, T., Ito, Y. and Maeda, S.
Sister-chromatid exchanges induced by trihalomethanes in rat erythroblastic cells and their suppression by crude catechin extracted from green tea (300) 241
Fujie, K., Ito, Y. and Maeda, S.
Acute cytogenetic effect of benzene on rat bone marrow cells in vivo and the effect of inducers or inhibitors of drug-metabolizing enzymes (298) 81
Fujikawa, K., Fort, F.L., Samejima, K. and Sakamoto, Y.
Genotoxic potency in *Drosophila melanogaster* of selected aromatic amines and polycyclic aromatic hydrocarbons as assayed in the DNA repair test (290) 175
Fujimoto, A., see Zhang, A. (301) 229
Fujita, M., see Ando, M. (292) 155
Fukuoka, S., see Arimoto, S. (287) 293
Furihata, C., see Ohsawa, K.-i. (287) 307
Furlan, D., see Celotti, L. (294) 117

Galasinski, S., see Ashraf, M. (302) 75
Galeotti, C., see Del Carratore, R. (301) 165
Galli, A., see Del Carratore, R. (301) 165
Gallo, C., see Pincheira, J. (295) 55
Galloway, S.M., see Armstrong, M.J. (302) 61
Galloway, S.M., see Armstrong, M.J. (303) 101
Galloway, S.M., see Bean, C.L. (292) 3
Ganesh, A., North, P. and Thacker, J.
Repair and misrepair of site-specific DNA double-strand breaks by human cell extracts (299) 251
Ganguly, B.B.
Cell division, chromosomal damage and micronucleus formation in peripheral lymphocytes of healthy donors: related to donor's age (295) 135
Ganguly, T. and Duker, N.J.
Inhibition of DNA polymerase activity by thymine hydrates (293) 71
Gans, M., see Rutledge, J.C. (296) 167
Gao, Y.T., see Qu, Y.H. (298) 105
Garner, R.C., see King, M.M. (292) 113
Garriott, M.L., see Oberly, T.J. (299) 77
Gaubatz, J.W. and Tan, B.H.
Age-related studies on the removal of 7-methylguanine from DNA of mouse kidney tissue following *N*-methyl-*N*-nitrosourea treatment (295) 81
Gaudio, L., see Foresti, M. (294) 69
Gauduchon, P., see André, V. (299) 63
Gaulden, M.E.
Maternal age effect: The enigma of Down syndrome and other trisomic conditions (296) 69
Gauthier, L., see Fernandez, M. (292) 83
Gaworski, C.L., see Lake, R.S. (301) 157
Generoso, W.M., see Rutledge, J.C. (296) 167
Generoso, W.M., see Sudman, P.D. (296) 143
Gennart, J.P., Baleux, C., Verellen-Dumoulin, C., Buchet, J.P., De Meyer, R. and Lauwerys, R.
Increased sister chromatid exchanges and tumor markers in workers exposed to elemental chromium-, cobalt- and nickel-containing dusts (299) 55
Gennart, J.P., see Van Hummelen, P. (300) 231
Gentil, A., see Cabral-Neto, J.B. (288) 249
George, E.O., see Aidoo, A. (298) 169
Geraci, G., see Foresti, M. (294) 69
Gerbault-Seureau, M., see Richard, F. (295) 71
Germolec, D.R., see Kligerman, A.D. (300) 125
Gescher, A., see Davies, J.E. (287) 157
Ghosh, R., see Roy (Pal), M. (291) 43
Giacomoni, P.U., see Muiras, M.L. (295) 47
Giannoni, P., see Scarabelli, L. (302) 1
Gibbs, P.E.M., see Lawrence, C.W. (299) 157
Gibbs, R.A., see Xu, Z. (288) 237
Gibert, I., see Pueyo, M. (293) 21
Gichner, T., Velemínský, J., Wagner, E.D. and Plewa, M.J.
Inhibitory effects of acetaminophen, 7,8-benzoflavone and methimazole towards *N*-nitrosodimethylamine mutagenesis in *Arabidopsis thaliana* (300) 57
Gil, L., see Adonis, M. (292) 51
Gilman, D., see Ashby, J. (292) 25
Giri, A.K.
The genetic toxicology of paracetamol and aspirin: a review (296) 199
Giver, C.R., see Grosovsky, A.J. (289) 231
Glatt, H., see Krämer, A. (290) 165
Glickman, B., see Curry, J. (288) 269
Glickman, B.W., see De Boer, J.G. (288) 173
Glickman, B.W., see Fan, E. (288) 85
Glickman, B.W., see Jiao, J. (301) 27
Glickman, B.W., see Pienkowska, M. (288) 123
Gocke, E., see Albertini, S. (298) 237
Gocke, E., see Chételat, A. (298) 139
Gocke, E., see Chételat, A. (292) 241
Gocke, E., see Chételat, A. (292) 251
Gold, A., see Newcomb, K.O. (287) 181
Gold, L.S., Slone, T.H., Stern, B.R. and Bernstein, L.
Comparison of target organs of carcinogenicity for mutagenic and non-mutagenic chemicals (286) 75
Golyasnaya, N.V., see Oktyabrsky, O.N. (293) 197
Gombar, V.K., Enslein, K. and Blake, B.W.
Carcinogenicity of azathioprine: An S–AR investigation (302) 7
Gonzalez, F.J., see McKinnon, R.A. (290) 27
Gordon, L.A., see Brandriff, B.F. (296) 33
Gorelick, N.J.
Application of HPLC in the ^{32}P-postlabeling assay (288) 5
Goto, R., see Sayato, Y. (300) 207
Gouy, D., see Vian, L. (291) 93
Graf, U., see Van Schaik, N. (286) 155
Grammatico, P., Scarpa, S., Picardo, M., Steindl, K., Nazzaro-Porro, M. and Del Porto, G.
Karyotype modifications in human malignant melanoma cell cultures after treatment with azelaic acid (300) 119
Granath, F., Ehrenberg, L. and Törnqvist, M.

Degree of alkylation of macromolecules in vivo from variable exposure (284) 297
Grant, S.G. and Bigbee, W.L.
In vivo somatic mutation and segregation at the human glycophorin A (*GPA*) locus: Phenotypic variation encompassing both gene-specific and chromosomal mechanisms (288) 163
Green, M.H.L., see McKelvey-Martin, V.J. (288) 47
Griffiths, T.D., see Ashraf, M. (302) 75
Grigg, G.W.
A general method for selecting strains of *Escherichia coli* having altered spontaneous or induced mutabilities (285) 91
Grigg, G.W.
Max Clark, a pioneer in fundamental mutation research (285) 3
Grigg, G.W., see Holliday, R. (285) 61
Grivas, S., see Vikse, R. (298) 207
Grollman, A.P., see Tchou, J. (299) 277
Groman, T., see Balbinder, E. (286) 253
Grootegoed, J.A., see Van Loon, A.A.W.M. (294) 139
Grosovsky, A.J., Skandalis, A., Hasegawa, L. and Walter, B.N.
Insertional inactivation of the *tk* locus in a human B lymphoblastoid cell line by a retroviral shuttle vector (289) 297
Grosovsky, A.J., Walter, B.N. and Giver, C.R.
DNA-sequence specificity of mutations at the human thymidine kinase locus (289) 231
Grosovsky, A.J., see Smith, L.E. (289) 245
Grosse, Y., see Pfohl-Leszkowicz, A. (289) 265
Grover, I.S. and Bala, S.
Studies on antimutagenic effects of guava (*Psidium guajava*) in *Salmonella typhimurium* (300) 1
Grummt, H.-J., see Grummt, T. (302) 19
Grummt, T., Grummt, H.-J. and Schott, G.
Chromosomal aberrations in peripheral lymphocytes of nurses and physicians handling antineoplastic drugs (302) 19
Grúz, P., Juříček, M., Žák, P. and Velemínský, J.
Mutagenicity of 3-azido-1,2-propanediol and 9-(3-azido-2-hydroxypropyl)-adenine in repair deficient strains of *Escherichia coli* (303) 1
Grzesiuk, E. and Janion, C.
Some aspects of EMS-induced mutagenesis in *Escherichia coli* (297) 313
Guengerich, F.P., see Shimada, T. (284) 233
Guillobel, H.C., see Leitão, A.C. (286) 173
Guillouf, C., see Papadopoulo, D. (294) 167
Gurr, J.R., see Lee-Chen, S.F. (294) 21
Gutenmann, W.H., see Shane, B.S. (301) 39
Gutz, H., see Schlake, C. (294) 59

Habedank, M., see Mertens, R. (300) 195
Habraken, Y. and Laval, F.
Increased resistance of the Chinese hamster mutant *irs1* cells to monofunctional alkylating agents by transfection of the *E. coli* or mammalian *N*3-methyladenine-DNA-glycosylase genes (293) 187
Haeney, M.R., see Vořechovský, I. (290) 255
Hagiwara, Y., Watanabe, M., Oda, Y., Sofuni, T. and Nohmi, T.
Specificity and sensitivity of *Salmonella typhimurium* YG1041 and YG1042 strains possessing elevated levels of both nitroreductase and acetyltransferase activity (291) 171
Hagmar, L., see Carstensen, U. (289) 187
Hakoda, M., see Chen, J. (287) 217
Hakovirta, H., Parvinen, M. and Lähdetie, J.
Effects of etoposide on stage-specific DNA synthesis during rat spermatogenesis (301) 189
Hakura, A., Mochida, H. and Yamatsu, K.
Dimethyl sulfoxide (DMSO) is mutagenic for bacterial mutagenicity tester strains (303) 127
Haley-Zitlin, V. and Richardson, A.
Effect of dietary restriction on DNA repair and DNA damage (295) 237
Hall, D.H., see Brown, M.D. (286) 189
Hamasaki, T., Sato, T., Nagase, H. and Kito, H.
The mutagenicity of organotin compounds as environmental pollutants (300) 265
Hammond, A.T., see Saito, H. (294) 255
Hamner, R.T., see Provost, G.S. (288) 133
Hamner, R.T., see Provost, G.S. (298) 145
Hanawalt, P.C.
"Close-fitting sleeves"—Recognition of structural defects in duplex DNA (289) 7
Hannan, M.A., see Nasim, A. (289) 55
Hannan, M.A., see Waghray, M. (284) 223
Hannigan, B.M., see Ranjbar, S. (285) 227
Hara, T., see Shibuya, T. (290) 273
Haramaki, N., see Sugiyama, M. (299) 95
Harikumar, P., see Kale, H. (298) 17
Harikumar, P., see Kale, H. (298) 9
Harmon, L.S., see Elia, M.C. (291) 193
Harnevo, L.E. and Agur, Z.
Use of mathematical models for understanding the dynamics of gene amplification (292) 17
Harrington-Brock, K., see Dearfield, K.L. (301) 57
Harris, P.J. and Ferguson, L.R.
Dietary fibre: its composition and role in protection against colorectal cancer (290) 97
Harris, P.V. and Boyd, J.B.
Re-evaluation of excision repair in the *mus304*, *mus306* and *mus308* mutants of Drosophila (301) 51
Hart, R.W. and Turturro, A.
Preface: Dietary restrictions, free radicals, electrophiles and gene stability (295) 149
Hart, R.W., see Chou, M.W. (295) 223
Hart, R.W., see Feuers, R.J. (295) 191
Hart, R.W., see Hass, B.S. (295) 281
Hart, R.W., see Manjgaladze, M. (295) 201
Hart, R.W., see Randerath, K. (295) 31
Hart, R.W., see Randerath, K. (295) 247
Hart, R.W., see Srivastava, V.K. (295) 265
Hart, R.W., see Turturro, A. (295) 151
Hartley-Asp, B., see Wallin, M. (287) 17
Hasegawa, L., see Grosovsky, A.J. (289) 297
Hasegawa, M.M., see Nishi, Y. (286) 145
Hass, B.S., Hart, R.W., Lu, M.H. and Lyn-Cook, B.D.

Effects of caloric restriction in animals on cellular function, oncogene expression, and DNA methylation in vitro (295) 281
Hastings, P.J.
Mechanism and control of recombination in fungi (284) 97
Hatahet, Z., see Evans, J. (299) 147
Hattori, K., see Nakatsu, Y. (293) 119
Haugen, A., see Kristensen, P. (302) 33
Hayakawa, H., see Nakatsu, Y. (293) 119
Hayashi, M., see Honma, M. (286) 165
Hayashi, M., see Suzuki, T. (285) 221
Hayashi, N. and Tsutsui, T.
Cell cycle dependence of cytotoxicity and clastogenicity induced by treatment of synchronized human diploid fibroblasts with sodium fluoride (290) 293
Hayatsu, H., Negishi, T., Arimoto, S. and Hayatsu, T.
Porphyrins as potential inhibitors against exposure to carcinogens and mutagens (290) 79
Hayatsu, H., see Arimoto, S. (287) 293
Hayatsu, H., see Mano, H. (290) 303
Hayatsu, T., see Hayatsu, H. (290) 79
Hazekamp-van Dokkum, A.-M., see Mullenders, L.H.F. (299) 271
He, J., see Betti, C. (301) 267
He, S., see Steinel, H.H. (285) 19
Hechenberger-Freudl, C., see Fautz, R. (291) 21
Heck, J.D., see Lake, R.S. (301) 157
Heflich, R.H., see Aidoo, A. (298) 169
Heim, R.A., Lench, N.J. and Swift, M.
Heterozygous manifestations in four autosomal recessive human cancer-prone syndromes: ataxia telangiectasia, xeroderma pigmentosum, Fanconi anemia, and Bloom syndrome (284) 25
Helbig, R., see Köberle, B. (301) 65
Held, K.D. and Hopcia, K.L.
Role of protein thiols in intrinsic radiation protection of DNA and cells (299) 261
Hellgren, D.
Mutagen-induced recombination in mammalian cells in vitro (284) 37
Henderson, L., Fedyk, J., Windebank, S. and Smith, M.
Induction of micronuclei in rat bone marrow and peripheral blood following acute and subchronic administration of azathioprine (291) 79
Hennig, U.G.G., see Von Borstel, R.C. (289) 97
Henning, K.A., see Friedberg, E.C. (289) 47
Henriques, J.A.P., see Pasqual, M.S. (286) 243
Heo, M.Y., Yu, K.S., Kim, K.H., Kim, H.P. and Au, W.W.
Anticlastogenic effect of flavonoids against mutagen-induced micronuclei in mice (284) 243
Herrera, G., Urios, A., Aleixandre, V. and Blanco, M.
Mutability by polycyclic hydrocarbons is improved in derivatives of *Escherichia coli* WP2 *uvrA* with increased permeability (301) 1
Herrera, L.A., Ostrosky-Wegman, P., Schiffmann, D., Chen, Q.Y., Ziegler-Skylakakis, K. and Andrae, U.
The insecticide buprofezin induces morphological transformation and kinetochore-positive micronuclei in cultured Syrian hamster embryo cells in the absence of detectable DNA damage (303) 121
Hertzog, P.R., see Elia, M.C. (291) 193
Herzschuh, R., see Raabe, F. (300) 99
Heyner, S., see Schultz, G.A. (296) 17
Higashi-Okai, K., see Okai, Y. (303) 63
Higashimoto, M., Purintrapiban, J., Kataoka, K., Kinouchi, T., Vinitketkumnuen, U., Akimoto, S., Matsumoto, H. and Ohnishi, Y.
Mutagenicity and antimutagenicity of extracts of three spices and a medicinal plant in Thailand (303) 135
Higley, M. and Stephen Lloyd, R.
Processivity of uracil DNA glycosylase (294) 109
Hiramitsu, M., see Nakayama, T. (303) 29
Hiramoto, K., Kato, T. and Kikugawa, K.
Generation of DNA-breaking activity in the Maillard reaction of glucose–amino acid mixtures in a solid system (285) 193
Hirano, K., see Mori, Y. (302) 129
Hirayama, T., see Watanabe, T. (302) 177
Hirsch, B., see Branda, R.F. (285) 269
Hoda, Q. and Sinha, S.P.
Vitamin C-mediated minimisation of Rogor-induced genotoxicity (299) 29
Hoebee, B., see Retèl, J. (299) 165
Hof, H., see Mersch-Sundermann, V. (291) 53
Hoffmann, G.R.
Bacterial assays for recombinagens (284) 125
Hoffschir, F., see Richard, F. (295) 71
Hofnung, M., see Quillardet, P. (297) 235
Högstedt, B., see Carstensen, U. (289) 187
Holcroft, J., see Curry, J. (288) 269
Holden, H.E., see Amacher, D.E. (300) 79
Holliday, R. and Grigg, G.W.
DNA methylation and mutation (285) 61
Holmberg, K., Fält, S., Johansson, A. and Lambert, B.
Clonal chromosome aberrations and genomic instability in X-irradiated human T-lymphocyte cultures (286) 321
Holme, J.A., see Becher, R. (285) 305
Holmquist, G.P., see Pfeifer, G.P. (288) 39
Honda, T., Sadamori, N., Itoh, M. and Kusumi, O.
Clonal fibroblastic cell lines established from a heavily exposed atomic bomb survivor (291) 125
Honma, M., Kataoka, E., Ohnishi, K., Kikuno, T., Hayashi, M., Sofuni, T. and Mizusawa, H.
Detection of recombinational mutations in cultured human cells by Southern blot analysis with minisatellite DNA probes (286) 165
Hooberman, B.H., Chakraborty, P.K. and Sinsheimer, J.E.
Quantitative structure–activity relationships for the mutagenicity of propylene oxides with Salmonella (299) 85
Hooberman, B.H., see Sinsheimer, J.E. (298) 197
Hoogerbrugge, J., see Van Loon, A.A.W.M. (294) 139
Hopcia, K.L., see Held, K.D. (299) 261
Hopkins, P.B., see Millard, J.T. (285) 165
Horikawa, K., see Matsuoka, A. (298) 255
Horikawa, K., see Tokiwa, H. (297) 181
Horiya, N., see Shibuya, T. (290) 273

Horsfall, M.J., see Lawrence, C.W. (299) 157
Hou, S.-M., see Steen, A.-M. (286) 209
Hoy, C.A., Carswell, C. and Schimke, R.T.
Bromodeoxyuridine/DNA analysis of replication in CHO cells after exposure to UV light (290) 217
Hozier, J.C., see Liechty, M.C. (286) 299
Hsia, M.T.S., see Hwang, J.-J. (286) 123
Hsie, A.W., see An, J. (289) 215
Hsie, A.W., see Ma, H. (298) 219
Hsie, A.W., see Xu, Z. (288) 237
Huang, S.-L., see Chao, C.C.-K. (303) 19
Humayun, M.Z., see Korah, R.M. (289) 205
Hung, J.-L., see Wang, T.-C.V. (294) 157
Husein, B., see Fautz, R. (291) 21
Husgafvel-Pursiainen, K., see Burvall, K. (285) 289
Husgafvel-Pursiainen, K., see Lähdetie, J. (300) 37
Hutchinson, F.
Induction of large DNA deletions by persistent nicks: A new hypothesis (299) 211
Hutchinson, J., see Balbinder, E. (286) 253
Hwang, J.-J., Hsia, M.T.S. and Jirtle, R.L.
Induction of sister chromatid exchange and micronuclei in primary cultures of rat and human hepatocytes by the peroxisome proliferator, Wy-14,643 (286) 123

Ianello, G., see Bolognesi, C. (285) 241
Ichinoseki, K., see Oda, T. (289) 223
Ide, H., see Evans, J. (299) 147
Iimura, K., see Mori, Y. (302) 129
Ikui, E., see Ohsawa, K.-i. (287) 307
Ilett, K.F., see Minchin, R.F. (290) 35
Iliakis, G., see Okayasu, R. (294) 199
Imreh, E., see Van Bao, T. (298) 131
Inamasu, T., see Omura, M. (298) 125
Inoue, M., Kurihara, T., Yamashita, M. and Tatsumi, K.
Effects of treatment with methyl methanesulfonate during meiotic and postmeiotic stages and maturation of spermatozoa in mice (294) 179
Inui, N., see Nishi, Y. (286) 145
Inui, N., see Sato, S.-i. (301) 45
Ioannides, C., see Lewis, D.F.V. (291) 61
Isbell, R.J., see Fowler, R.G. (284) 307
Isbell, R.J., see Krishnaswamy, S. (288) 311
Ishida, T., see Kishi, K. (301) 183
Ishikawa, T., see Aoki, K. (293) 225
Ishinishi, N., see Omura, M. (298) 125
Islam, S., see Qadri, S.A. (298) 53
Ito, Y., see Fujie, K. (298) 81
Ito, Y., see Fujie, K. (300) 241
Itoh, M., see Honda, T. (291) 125
Itome, C., see Arimoto, S. (287) 293
Ivett, J.L., Brusick, D.J., Young, R.R., Chappel, C.I. and Nestmann, E.R.
Genetic toxicology evaluation of commercial beers, III. SCE, chromosome aberrations, and forward mutation (HGPRT) of commercial beer products in CHO cells (298) 43

J.-Raman, M., see Chatterjee, A. (290) 231
Jackson, M.A., Stack, H.F. and Waters, M.D.
The genetic toxicology of putative nongenotoxic carcinogens (296) 241
Jacobson-Kram, D., see Tucker, J.D. (297) 101
Jan, K.Y., see Lee-Chen, S.F. (294) 21
Janion, C., see Grzesiuk, E. (297) 313
Jansson, K., Mäki-Paakkanen, J., Vaittinen, S.-L., Vartiainen, T., Komulainen, H. and Tuomisto, J.
Cytogenetic effects of 3-chloro-4-(dichloromethyl)-5-hydroxy-2(5*H*)-furanone (MX) in rat peripheral lymphocytes in vitro and in vivo (299) 25
Janz, S. and Shacter, E.
Activated murine neutrophils induce unscheduled DNA synthesis in B lymphocytes (293) 173
Janz, S., see Raabe, F. (300) 99
Jass, J.R.
Evolution of hereditary bowel cancer (290) 13
Jaszczak, K., see Parada, R. (300) 259
Jeggo, P., see Caldecott, K. (293) 259
Jena, G.B., see Bhunya, S.P. (292) 231
Jenkins, D., see King, M.M. (292) 113
Jensen, A.-G., see Rank, J. (300) 29
Jensen, K., see Rank, J. (300) 29
Jessop, J.K., see Somia, N.V. (294) 51
Jha, A.N., Noditi, M., Nilsson, R. and Natarajan, A.T.
Genotoxic effects of sodium arsenite on human cells (284) 215
Jha, A.N., see Natarajan, A.T. (299) 297
Ji, J. and Mathews, C.K.
A forward mutation assay in phage T4: Application to gene *42* mutator mutations (294) 247
Jiang, J., see Cai, L. (303) 157
Jiao, J., Glickman, B.W., Anderson, M.W. and Zielinska, M.
Mutational specificity of *N*-nitrosodimethylamine: Comparison between in vivo and in vitro assays (301) 27
Jirtle, R.L., see Hwang, J.-J. (286) 123
Joenje, H., see Retèl, J. (299) 165
Johannes, C., see Obe, G. (299) 305
Johansson, A., see Holmberg, K. (286) 321
Johnsen, A., see Moyer, R. (288) 291
Johnson, I.T., see Musk, S.R.R. (300) 111
Johnson, S.A., see Randerath, K. (295) 11
Johnston, P.J., see Bryant, P.E. (299) 289
Jones, M.E.
Accounting for plating efficiency when estimating spontaneous mutation rates (292) 187
Jones, M.E.
An improved estimator of spontaneous mutation rates in Luria–Delbrück fluctuation experiments (292) 191
Jones, N.J., see Ashby, J. (292) 25
Jongmans, W., Verhaegh, G.W.C.T., Sankaranarayanan, K., Lohman, P.H.M. and Zdzienicka, M.Z.
Cellular characteristics of Chinese hamster cell mutants resembling ataxia telangiectasia cells (294) 207
Joseph-Lerner, N., Fejgin, M., Ben-Nun, I., Legum, C. and Amiel, A.
The correlation between the frequency of sister-chromatid exchange and human reproductive hormones (300) 247
Josephy, P.D., see Morrison, L.D. (302) 45
Joyce, A.J., see Amacher, D.E. (300) 79
Juříček, M., see Grúz, P. (303) 1

Kaden, D.A., see Murphy, J.C. (296) 221
Kadlubar, F.F., see Minchin, R.F. (290) 35
Kainzbauer, E., see Knasmüller, S. (299) 45
Kaji, H., see Watanabe, T. (302) 177
Kale, H., Harikumar, P., Kulkarni, S.B., Nair, P.M. and Netrawali, M.S.
Assessment of the genotoxic potential of riboflavin and lumiflavin. B. Effect of light (298) 17
Kale, H., Harikumar, P., Nair, P.M. and Netrawali, M.S.
Assessment of the genotoxic potential of riboflavin and lumiflavin. A. Effect of metabolic enzymes (298) 9
Kalle, W.H.J., see Mullenders, L.H.F. (299) 271
Kamatani, N., see Chen, J. (287) 217
Kamiyama, S., see Miyamura, Y. (295) 63
Kane, A., see Pfohl-Leszkowicz, A. (289) 265
Kaneda, S., see Yamao, F. (289) 83
Kantor, G.J. and Shanower, G.A.
A re-examination of the intragenome distribution of repaired sites in proliferating xeroderma pigmentosum complementation group C fibroblasts (293) 55
Kappas, A., see Voutsinas, G. (298) 261
Kargacin, B., Klein, C.B. and Costa, M.
Mutagenic responses of nickel oxides and nickel sulfides in Chinese hamster V79 cell lines at the xanthine–guanine phosphoribosyl transferase locus (300) 63
Kasper, P., see Müller, K. (292) 213
Kataoka, E., see Honma, M. (286) 165
Kataoka, K., see Higashimoto, M. (303) 135
Kato, K., see Mano, H. (290) 303
Kato, R., see Ando, M. (292) 155
Kato, T., see Hiramoto, K. (285) 193
Katoh, Y., Maekawa, M. and Sano, Y.
Effects of 5-azacytidine on somatic mutation in a soybean test system (300) 49
Kator, K., see Sasaki, Y.F. (286) 221
Kaur, G.P., see Mori, T. (293) 143
Kawakishi, S., see Nakayama, T. (303) 29
Kawakishi, S., see Yamada, T. (286) 293
Keefer, L.K., see Maragos, C.M. (298) 187
Keenan, K.P., see Elia, M.C. (291) 193
Keng, P.C., see Zhu, W. (294) 101
Kern, S., see Mersch-Sundermann, V. (291) 53
Kesavan, P.C., see Abraham, S.K. (301) 255
Kesavan, P.C., see Abraham, S.K. (303) 109
Kesavan, P.C., see Farooqi, Z. (302) 83
Keszenman, D., see Nunes, E. (289) 165
Khan, P.K. and Sinha, S.P.
Antimutagenic efficacy of higher doses of vitamin C (298) 157
Kholstova, T.A., see Oktyabrsky, O.N. (293) 197
Kidson, C., see Chen, P. (285) 69
Kiefer, J. and Feige, M.
The significance of DNA double-strand breaks in the UV inactivation of yeast cells (299) 219
Kiefer, J.
Problems, pitfalls, perspectives and potentials of quantitative theoretical models for cellular radiation action (289) 27
Kienzl, H., see Knasmüller, S. (299) 45
Kikuchi, Y., see Nakamura, M. (291) 29
Kikugawa, K., see Hiramoto, K. (285) 193
Kikuno, T., see Honma, M. (286) 165
Kilbey, B.J., see Lawrence, C.W. (299) 157
Kim, H.P., see Heo, M.Y. (284) 243
Kim, K.H., see Heo, M.Y. (284) 243
Kinae, N., see Sasaki, Y.F. (286) 221
Kinae, N., see Sasaki, Y.F. (300) 5
Kinae, N., see Watanabe, T. (302) 177
Kinashi, Y., Nagasawa, H. and Little, J.B.
Mutagenic effects of restriction enzymes in Chinese hamster cells: evidence for high mutagenicity of Sau3AI at the *hprt* locus (285) 253
Kinebuchi, H., see Mano, H. (290) 303
King, M.M., Cuzick, J., Jenkins, D., Routledge, M.N. and Garner, R.C.
Immunoaffinity concentration of human lung DNA adducts using an *anti*-benzo[*a*]pyrene-diol-epoxide–DNA antibody. Analysis by ^{32}P-postlabelling or ELISA (292) 113
Kinloch, R.A., see Wassarman, P.M. (296) 3
Kinouchi, T., see Higashimoto, M. (303) 135
Kirkwood, T.B.L., see Kowald, A. (295) 93
Kirsch-Volders, M., see Van Hummelen, P. (300) 231
Kirshna, G., Brott, D., Urda, G., McKeel, M., Zandee, J. and Theiss, J.
Comparative micronucleus quantitation in pre- and post-column fractionated mouse bone marrow by manual and flow methods (302) 119
Kishi, K. and Ishida, T.
Clastogenic activity of sodium fluoride in great ape cells (301) 183
Kitchin, K.T., Brown, J.L. and Kulkarni, A.P.
Predicting rodent carcinogenicity of Ames test false positives by in vivo biochemical parameters (290) 155
Kito, H., see Hamasaki, T. (300) 265
Kleibl, K., see Betina, S. (290) 249
Klein, C.B., see Kargacin, B. (300) 63
Kleinjans, J.C.S., see De Kok, T.M.C.M. (302) 103
Kligerman, A.D., Chapin, R.E., Erexson, G.L., Germolec, D.R., Kwanyuen, P. and Yang, R.S.H.
Analyses of cytogenetic damage in rodents following exposure to simulated groundwater contaminated with pesticides and a fertilizer (300) 125
Klink, E.C., see De Cock, J.G.R. (293) 11
Klopman, G., see Rosenkranz, H.S. (291) 135
Klopman, G., see Rosenkranz, H.S. (303) 83
Klungsøyr, L., see Vikse, R. (298) 207
Knapstad, A., see Vikse, R. (298) 207
Knasmüller, S., Zöhrer, E., Kainzbauer, E., Kienzl, H., Colbert, B., Lamprecht, G. and Schulte-Hermann, R.
Detection of mutagenic activity in textiles with *Salmonella typhimurium* (299) 45
Knuutila, S., see Larramendy, M.L. (292) 165
Köberle, B., Röscheisen, C., Helbig, R. and Speit, G.
Molecular characterization of methyl methanesulphonate (MMS)-induced HPRT mutations in V79 cells (301) 65
Kodama, S., Komatsu, K., Okumura, Y. and Oshimura, M.

Suppression of X-ray-induced chromosome aberrations in ataxia telangiectasia cells by introduction of a normal human chromosome 11 (293) 31
Kogut, N.N., see Antipenko, Ye.N. (289) 145
Kohalmi, S.E. and Kunz, B.A.
Mutational specificity of thymine nucleotide depletion in yeast (289) 73
Koizumi, A., see Miyamura, Y. (295) 63
Kojima, M., see Suzuki, M. (301) 125
Koldamova, R.P., see Lefterov, I.M. (284) 195
Kolhouse, J.F., see Deutsch, J.C. (302) 183
Kolman, A., see Bastlová, T. (287) 283
Komatsu, K., see Kodama, S. (293) 31
Komulainen, H., see Jansson, K. (299) 25
Kong, J., see Chou, M.W. (295) 223
Kopsidas, G. and MacPhee, D.G.
Glucose inhibition of mutagenesis by 9-aminoacridine in *Salmonella typhimurium* (285) 101
Korah, R.M. and Humayun, M.Z.
Mutagenic and recombinagenic effects of diethylstilbestrol quinone (289) 205
Körber, C., see Stopper, H. (300) 165
Korogodin, V.I.
The study of post-irradiation recovery of yeast: the 'pre-molecular period' (289) 17
Kováčiková, Z., see Chorvatovičová, D. (302) 207
Kow, Y.W., see Bockrath, R. (288) 207
Kowald, A. and Kirkwood, T.B.L.
Mitochondrial mutations, cellular instability and ageing: modelling the population dynamics of mitochondria (295) 93
Kowalska-Loth, B., see Staron, K. (285) 175
Kozuka, H., see Yamada, H. (290) 281
Kraemer, K.H., see Rünger, T.M. (293) 47
Kraemer, P.M., see Ray, F.A. (284) 265
Krämer, A., Pudil, J., Frank, H., Oesch, F. and Glatt, H.
Some substrates and inhibitors of cytosolic epoxide hydrolase induce sister-chromatid exchanges in mammalian cells, but do not induce gene mutations in *Salmonella typhimurium* and V79 cells (290) 165
Kraynak, A.R., see Elia, M.C. (291) 193
Kretz, P.L., see Lundberg, K.S. (301) 99
Kretz, P.L., see Provost, G.S. (288) 133
Kretz, P.L., see Provost, G.S. (298) 145
Kriajevskaia, M., see Zhu, W. (294) 101
Krishnaswamy, G. and Dewey, W.C.
Cisplatin induced cell killing and chromosomal aberrations in CHO cells: treated during G_1 or S phase (293) 161
Krishnaswamy, S., Rogers, J.A., Isbell, R.J. and Fowler, R.G.
The high mutator activity of the *dnaQ49* allele of *Escherichia coli* is medium-dependent and results from both defective $3' \rightarrow 5'$ proofreading and methyl-directed mismatch repair (288) 311
Kristensen, P., Eilertsen, E., Einarsdóttir, E., Øvrebø, S. and Haugen, A.
Effect modification by inorganic lead in the dominant lethal assay (302) 33
Kritchevsky, D.
Colorectal cancer: the role of dietary fat and caloric restriction (290) 63
Kritschevsky, D., see Djuric, Z. (295) 181
Krone, W., see Motejlek, K. (293) 205
Kulkarni, A.P., see Kitchin, K.T. (290) 155
Kulkarni, S.B., see Kale, H. (298) 17
Kumar, J.P., see Fryxell, K.J. (285) 183
Kumar, R., see Erdinger, L. (292) 41
Kunhi, M., see Waghray, M. (284) 223
Kunz, B.A., Eckardt-Schupp, F. and Brendel, M.
A *Festschrift* for Robert H. Haynes (289) 3
Kunz, B.A., see Kohalmi, S.E. (289) 73
Kuo, M.-L. and Lin, J.-K.
The genotoxicity of the waste water discharged from paraquat manufacturing and its pyridyl components (300) 223
Kurihara, T., see Inoue, M. (294) 179
Kurishita, A., see Miyamura, Y. (295) 63
Kuroiwa, Y., see Lee, H. (297) 53
Kusumi, O., see Honda, T. (291) 125
Kuznetsov, S.A., see Verschaeve, L. (287) 253
Kwan, T.C., see Tucker, J.D. (301) 19
Kwanyuen, P., see Kligerman, A.D. (300) 125
Kwon, B.S., see Rinchik, E.M. (286) 199

La, D.K. and Froines, J.R.
Comparison of DNA binding between the carcinogen 2,6-dinitrotoluene and its noncarcinogenic analog 2,6-diaminotoluene (301) 79
Lafleur, M.V.M. and Retèl, J.
Contrasting effects of SH-compounds on oxidative DNA damage: repair and increase of damage (295) 1
Lafleur, M.V.M., see Braun, J.E.F. (289) 255
Lafleur, M.V.M., see Retèl, J. (299) 165
Låg, M., see Becher, R. (285) 305
Lähdetie, J., Engström, K., Husgafvel-Pursiainen, K., Nylund, L., Vainio, H. and Sorsa, M.
Maternal smoking induced cotinine levels and genotoxicity in second trimester amniotic fluid (300) 37
Lähdetie, J., see Hakovirta, H. (301) 189
Lähdetie, J., see Salonen, K. (298) 285
Lahiri, M., Maru, G.B. and Bhide, S.V.
Effect of plant phenols, β-carotene and α-tocopherol on benzo[*a*]pyrene-induced DNA damage in the mouse forestomach mucosa (target organ) and bone marrow polychromatic erythrocytes (non-target organ) (303) 97
Lake, R.S., Gaworski, C.L., Crouse, E.W. and Heck, J.D.
Phenotypic instability of Salmonella strain YG1 024 during mutagenicity assays of arylamine promutagens (301) 157
Lambert, B., see Bastlová, T. (287) 283
Lambert, B., see Holmberg, K. (286) 321
Lambert, B., see Steen, A.-M. (286) 209
Lamoliatte, E., see Richard, F. (295) 71
Lamprecht, G., see Knasmüller, S. (299) 45
Lancelot, J.C., see André, V. (299) 63
Landrock, A., see Raabe, F. (300) 99
Lang, R., see Madle, S. (291) 87
Laquerbe, A., see Papadopoulo, D. (294) 167

Lares, I., see Espinosa-Aguirre, J.J. (300) 151
Larramendy, M.L., Reigosa, M.A. and Knuutila, S.
Pig plasma modulates cell cycle kinetics but not the baseline frequency of sister-chromatid exchanges in human lymphocytes (292) 165
Lauer, C.P., see Pasqual, M.S. (286) 243
Lauwerys, R., see Gennart, J.P. (299) 55
Lauwerys, R., see Van Hummelen, P. (300) 231
Laval, F., see Habraken, Y. (293) 187
Lavin, M., see Chen, P. (285) 69
Lawrence, C.W., Gibbs, P.E.M., Borden, A., Horsfall, M.J. and Kilbey, B.J.
Mutagenesis induced by single UV photoproducts in *E. coli* and yeast (299) 157
Lawrence, J.N. and Benford, D.J.
Chemically-induced unscheduled DNA synthesis in cultures of adult human epidermal keratinocytes (291) 105
Lazutka, J.R.
Analysis of cellular kinetics in PHA-stimulated blood lymphocytes: A commentary (290) 317
Leakey, J.E.A., see Manjgaladze, M. (295) 201
Lechevrel, M., see André, V. (299) 63
Lee-Chen, S.F., Gurr, J.R., Lin, I.B. and Jan, K.Y.
Arsenite enhances DNA double-strand breaks and cell killing of methyl methanesulfonate-treated cells by inhibiting the excision of alkali-labile sites (294) 21
Lee, G.S.-F., see Von Borstel, R.C. (289) 97
Lee, H., Aoki, K., Sakagami, H., Yoshida, T. and Kuroiwa, Y.
Interaction of pine cone extract fraction VI with mutagens (297) 53
Leenhouts, H.P., see Chadwick, K.H. (298) 141
Lefrançois, D., see Richard, F. (295) 71
Lefterov, I.M. and Koldamova, R.P.
Schedule dependent variation in human lymphocyte sensitivity to bleomycin and repair of chromosomal aberrations in G_2 (284) 195
Legator, M.S., see Au, W.W. (300) 273
Legum, C., see Joseph-Lerner, N. (300) 247
Lehmann, A.R., see Steingrimsdottir, H. (294) 29
Leitão, A.C., Soares, R.A., Cardoso, J.S., Guillobel, H.C. and Caldas, L.R.
Inhibition and induction of SOS responses in *Escherichia coli* by cobaltous chloride (286) 173
Lench, N.J., see Heim, R.A. (284) 25
Leone, R., see Fracasso, M.E. (298) 91
Leonhardt, E.A. and Boyd, J.B.
Identification of a new locus, *mus115*, in *Drosophila melanogaster* (301) 121
Leopardi, P., Zijno, A., Bassani, B. and Pacchierotti, F.
In vivo studies on chemically induced aneuploidy in mouse somatic and germinal cells (287) 119
Le Talaër, J.Y., see André, V. (299) 63
Letois, B., see André, V. (299) 63
Levin, D.B., see Brail, L. (303) 171
Levin, D.B., see Fan, E. (288) 85
Levy, M.S., Balbinder, E. and Nagel, R.
Effect of mutations in SOS genes on UV-induced precise excision of Tn*10* in *Escherichia coli* (293) 241
Lewis, D.F.V., Ioannides, C. and Parke, D.V.
Validation of a novel molecular orbital approach (COMPACT) for the prospective safety evaluation of chemicals, by comparison with rodent carcinogenicity and Salmonella mutagenicity data evaluated by the U.S. NCI/NTP (291) 61
Lewis, S.E., Barnett, L.B. and Shelby, M.D.
ENU mutagenesis in the mouse electrophoretic specific-locus test, 2. Mutational studies of mature oocytes (296) 129
L'Haridon, J., see Fernandez, M. (292) 83
L'Haridon, J., see Fernandez, M. (298) 31
Liber, H.L., see Amundson, S.A. (284) 287
Liber, H.L., see Amundson, S.A. (286) 233
Liechty, M.C., Rauchfuss, H.S., Lugo, M.H. and Hozier, J.C.
Sequence analysis of tk_a^--1 and tk_b^+-1 alleles in L5178Y $tk^{+/-}$ mouse-lymphoma cells and spontaneous $tk^{-/-}$ mutants (286) 299
Lin, I.B., see Lee-Chen, S.F. (294) 21
Lin, J.-K., see Kuo, M.-L. (300) 223
Lin, J.-M., see Chen, W. (287) 227
Lin, M.S., see Zhang, A. (301) 229
Linacero, R. and Vázquez, A.M.
Somaclonal variation in rye (302) 201
Lindahl, T., see Vaughan, P. (293) 249
Lioi, M.B., see Scarfì, M.R. (289) 291
Lisk, D.J., see Shane, B.S. (301) 39
Little, J.B., see Kinashi, Y. (285) 253
Liu, P.K., Trujillo, J.M. and Monnat Jr., R.J.
Spectrum of spontaneous mutation in animal cells containing an aphidicolin-resistant DNA polymerase α (288) 229
Lloyd, R.S., see Mori, T. (293) 143
Loeb, L.A., see Reid, T.M. (289) 181
Logan, D.M., see Brail, L. (303) 171
Logan, D.M., see Fan, E. (288) 85
Lohman, P.H.M., see De Cock, J.G.R. (293) 11
Lohman, P.H.M., see Jongmans, W. (294) 207
Lohman, P.H.M., see Mol, M.A.E. (294) 235
Lohman, P.H.M., see Van Loon, A.A.W.M. (294) 139
Lombard, M., see Richard, F. (295) 71
Lomi, A., see Sbrana, I. (287) 57
Lopez-Camacho, C. and Polaina, J.
Random mutagenesis of a plasmid-borne glycosidase gene and phenotypic selection of mutants in *Escherichia coli* (301) 73
Lopez-Saez, J.F., see Pincheira, J. (295) 55
Loprieno, N., see Barale, R. (300) 15
Löscher, W., see Zwingelberg, R. (302) 39
Lötjönen, S., see Tuppurainen, K. (287) 235
Lu, M.H., see Hass, B.S. (295) 281
Lugo, M.H., see Liechty, M.C. (286) 299
Lundberg, K.S., Kretz, P.L., Provost, G.S. and Short, J.M.
The use of selection in recovery of transgenic targets for mutation analysis (301) 99
Lundberg, K.S., see Provost, G.S. (288) 133
Luo, X.-M., see Dong, J.-T. (302) 97
Lutgerink, J.T., see Retèl, J. (299) 165
Lutz, W.K., see Shephard, S.E. (302) 91
Lutze, L.H., Cleaver, J.E., Morgan, W.F. and Winegar, R.A.
Mechanisms involved in rejoining DNA double-strand

breaks induced by ionizing radiation and restriction enzymes (299) 225
Lyn-Cook, B.D., see Hass, B.S. (295) 281
Lyn-Cook, L.E., see Aidoo, A. (298) 169
Lynch, A.M. and Parry, J.M.
The cytochalasin-B micronucleus/kinetochore assay in vitro: Studies with 10 suspected aneugens (287) 71
Lyons, B.W., see Warters, R.L. (293) 91

Ma, H., An, J., Hsie, A.W. and Au, W.W.
Mutagenicity and cytotoxicity of 2-methoxyethanol and its metabolites in Chinese hamster cells (the CHO/HPRT and AS52/GPT assays) (298) 219
Ma, T.-H. and Chu, K.-C.
Effect of the extremely low frequency (ELF) electromagnetic field (EMF) on developing embryos of the fruit fly (*Drosophila melanogaster* L.) (303) 35
Ma, T.-H., see Baud-Grasset, S. (303) 77
Maccabee, M., see Evans, J. (299) 147
MacPhee, D.G.
Directed mutation: paradigm postponed (285) 109
MacPhee, D.G., see Kopsidas, G. (285) 101
Maddalena, A., see Di Leonardo, A. (301) 177
Madle, S. and Lang, R.
Assessment and evaluation of genotoxicity findings (291) 87
Madle, S.
Problem of the harmonization of philosophies for genotoxicity testing (300) 73
Madle, S., see Seelbach, A. (303) 163
Madrigal-Bujaidar, E., Cadena, S.R., Trujillo-Valdés, V.M. and Cassani, M.
Sister-chromatid exchange frequencies induced by metrifonate in mammalian in vivo and in vitro systems (300) 135
Madrigal-Bujaidar, E., see Márquez-Márquez, R. (299) 1
Maeda, S., see Fujie, K. (298) 81
Maeda, S., see Fujie, K. (300) 241
Maekawa, M., see Katoh, Y. (300) 49
Mailhes, J.B., Marchetti, F. and Aardema, M.J.
Griseofulvin-induced aneuploidy and meiotic delay in mouse oocytes: effect of dose and harvest time (300) 155
Majone, F., see Russo, A. (287) 275
Mäki-Paakkanen, J., see Jansson, K. (299) 25
Malacarne, D., see Taningher, M. (301) 275
Malfatto, C., see Scarabelli, L. (302) 1
Malick, A.M., see Zhang, X.-X. (302) 213
Malling, H.V., see Burkhart, J.G. (292) 69
Mamet-Bratley, M.D., see Racine, J.-F. (294) 285
Manjgaladze, M., Chen, S., Frame, L.T., Seng, J.E., Duffy, P.H., Feuers, R.J., Hart, R.W. and Leakey, J.E.A.
Effects of caloric restriction on rodent drug and carcinogen metabolizing enzymes: implications for mutagenesis and cancer (295) 201
Mano, H., Yamamoto, M., Araya, J.C., Kato, K., Tsutsui, M., Ohta, T., Yoshida, K., Kinebuchi, H. and Hayatsu, H.
Mutagenicity of blue rayon extracts of human bile in the Ames test (290) 303
Maragos, C.M., Andrews, A.W., Keefer, L.K. and Elespuru, R.K.
Mutagenicity of glyceryl trinitrate (nitroglycerin) in *Salmonella typhimurium* (298) 187
Marchetti, F., see Mailhes, J.B. (300) 155
Mariani, L., see Vatteroni, L. (291) 163
Mariani, T., see Vatteroni, L. (291) 163
Marini, M., Frabetti, F., Zunica, G., Brandi, G. and Cantoni, O.
Differential effect of L-histidine in human lymphocytes damaged by different oxygen radical producing systems (301) 243
Marnett, L.J., see Benamira, M. (293) 1
Marquardt, H., see Forster, R. (298) 71
Márquez-Márquez, R., Madrigal-Bujaidar, E. and Tejada de Hernández, I.
Genotoxic evaluation of ammonium inactivated aflatoxin B_1 in mice fed with contaminated corn (299) 1
Marrazzini, A., see Barale, R. (300) 15
Martel-Planche, G., see Mironov, N.M. (288) 197
Martelli, A., Campart, G.B., Benvenuto, F., Fresu, A.M. and Brambilla, G.
Comparison of micronucleus formation in mouse bone marrow and spleen (292) 63
Martin, A.O., see McCann, J. (297) 61
Martin, G.F., see Chen, J. (287) 217
Martin, M., see Sabatier, L. (284) 257
Martinez, G., see Espinosa-Aguirre, J.J. (303) 55
Martins, M.B., Sabatier, L., Ricoul, M., Pinton, A. and Dutrillaux, B.
Specific chromosome instability induced by heavy ions: a step towards transformation of human fibroblasts? (285) 231
Maru, G.B., see Lahiri, M. (303) 97
Masahito, Prince, see Aoki, K. (293) 225
Mašek, F., see Betina, S. (290) 249
Masker, W. and Crissey, M.A.
The effect of the $3' \rightarrow 5'$ exonuclease of T7 DNA polymerase on frameshifts and deletions (301) 235
Masker, W., see Scearce, L.M. (288) 301
Masumbuko, M.B., De Meyer, R. and Freund, M.M.
Synaptonemal complex studies in male mice treated with cyproterone acetate or with testosterone (303) 45
Matassino, D., see Scarfì, M.R. (289) 291
Mathews, C.K., see Ji, J. (294) 247
Matsuda, H., see Shibuya, T. (290) 273
Matsuhashi, T., see Yamada, H. (290) 281
Matsumoto, H., see Higashimoto, M. (303) 135
Matsumura, H., Watanabe, K. and Ohta, T.
o-Vanillin enhances chromosome aberrations induced by alkylating agents in cultured Chinese hamster cells (298) 163
Matsuoka, A., Horikawa, K., Yamazaki, N., Sera, N., Sofuni, T. and Tokiwa, H.
Chromosomal aberrations induced in vitro by 3,7- and 3,9-dinitrofluoranthene (298) 255
Matsushita, H., see Matsushita Jr., H. (301) 213
Matsushita Jr., H., Endo, O., Matsushita, H., Yamamoto, M. and Mochizuki, M.
Mutagenicity of alkylhydrazine oxalates in *Salmonella typhimurium* TA100 and TA102 demonstrated by modifying the growth conditions of the bacteria (301) 213

Mattar, F.E., see El-Nahas, S.M. (301) 143
Matthews, C.D., see Provost, G.S. (288) 133
Matula, T.I., see Rogers, C.G. (299) 9
Matulić, M., see Osmak, M. (303) 113
McCann, J., Dietrich, F., Rafferty, C. and Martin, A.O.
A critical review of the genotoxic potential of electric and magnetic fields (297) 61
McCready, S. and Cox, B.
Repair of 6–4 photoproducts in *Saccharomyces cerevisiae* (293) 233
McGregor, D.B., see Edwards, A.J. (289) 139
McIntosh, E.M.
Expression of DNA replication genes in the yeast cell cycle (289) 61
McKeel, M., see Kirshna, G. (302) 119
McKelvey-Martin, V.J., Green, M.H.L., Schmezer, P., Pool-Zobel, B.L., De Méo, M.P. and Collins, A.
The single cell gel electrophoresis assay (comet assay): A European review (288) 47
McKelvey, T.W., see Elia, M.C. (291) 193
McKinnon, R.A., Burgess, W.M., Gonzalez, F.J. and McManus, M.E.
Metabolic differences in colon mucosal cells (290) 27
McManus, M.E., see McKinnon, R.A. (290) 27
McMillan, T., see Powell, S. (294) 9
Medline, A., see Bruce, W.R. (290) 111
Meier, J.R., see Baud-Grasset, S. (303) 77
Meijers, M., see Natarajan, A.T. (287) 47
Meijers, M., see Natarajan, A.T. (299) 297
Melcion, C., see Cliet, I. (292) 105
Meli, C., see Barale, R. (300) 15
Melton, D.W., see Somia, N.V. (294) 51
Meng, Z. and Zhang, L.
Cytogenetic damage induced in human lymphocytes by sodium bisulfite (298) 63
Mersch-Sundermann, V., Wintermann, F., Kern, S. and Hof, H.
Influence of S9 mix composition on the SOS response in *Escherichia coli* PQ37 by polycyclic aromatic hydrocarbons (291) 53
Merten, H., see Raabe, F. (300) 99
Mertens, R., Severin, K. and Habedank, M.
Effect of human and recombinant IFN-α and IFN-β on the sister-chromatid exchange (SCE) frequency in amniotic fluid cells in vitro (300) 195
Merz, M., see Schulte-Frohlinde, D. (299) 233
Mevissen, M., see Zwingelberg, R. (302) 39
Mexia, J., see Rueff, J. (289) 197
Meyer, M., see Balbinder, E. (286) 253
Meyne, J., see Ray, F.A. (284) 265
Miadoková, E., see Podstavková, S. (293) 65
Miadoková, E., see Vlčková, V. (302) 153
Michaelis, A. and Rieger, R.
Inhibition of protein synthesis by cycloheximide does not prevent adaptive responses triggered by heavy metal salts in *Vicia faba* (302) 157
Michaelis, A., see Rieger, R. (302) 161
Michel, X.R., Cassand, P.M. and Narbonne, J.F.
Activation of benzo[*a*]pyrene and 2-aminoanthracene to bacteria mutagens by mussel digestive gland postmitochondrial fraction (301) 113
Millard, J.T. and Hopkins, P.B.
Site-specific metal-induced damage of mitomycin C-cross-linked DNA fragments in the presence of sodium dithionite (285) 165
Miller, S., see Srivastava, V.K. (295) 265
Mimura, M., see Shimada, T. (284) 233
Minchin, R.F., Kadlubar, F.F. and Ilett, K.F.
Role of acetylation in colorectal cancer (290) 35
Minkin, S., see Bruce, W.R. (290) 111
Minnick, D.T., see Anderson, R.D. (288) 181
Minunni, M., see Barale, R. (300) 15
Miró, R., see Barquinero, J.F. (286) 275
Mironov, N.M., Bleicher, F., Martel-Planche, G. and Montesano, R.
Nonrandom distribution of O^6-methylguanine in H-ras gene sequence from DNA modified with *N*-methyl-*N*-nitrosourea (288) 197
Mitscher, L.A., see Obaseiki-Ebor, E.E. (302) 109
Miwa, M., see Aikawa, K. (301) 93
Miyahara, T., see Yamada, H. (290) 281
Miyahara, T., see Yamada, H. (302) 137
Miyamura, Y., Tawa, R., Koizumi, A., Uehara, Y., Kurishita, A., Sakurai, H., Kamiyama, S. and Ono, T.
Effects of energy restriction on age-associated changes of DNA methylation in mouse liver (295) 63
Mizusawa, H., see Honma, M. (286) 165
Mochida, H., see Hakura, A. (303) 127
Mochizuki, M., see Matsushita Jr., H. (301) 213
Modesti, D., see Antoccia, A. (287) 93
Mogg, A.E., see Burke, J.F. (294) 309
Mohamed, A.A., see El-Nahas, S.M. (301) 143
Mohamed, A.Y.A., see El-Din, A.Y.G. (300) 91
Mohr, U., see Peiser, C. (289) 281
Mol, M.A.E., Van der Schans, G.P. and Lohman, P.H.M.
Quantification of sulfur mustard-induced DNA interstrand cross-links and single-strand breaks in cultured human epidermal keratinocytes (294) 235
Monastra, C., see Fracasso, M.E. (298) 91
Monnat Jr., R.J., see Liu, P.K. (288) 229
Montesano, R., see Mironov, N.M. (288) 197
Monti, D., see Chiricolo, M. (295) 105
Moon, E.Y., see Edwards, A.J. (289) 139
Moore, M.M., see Dearfield, K.L. (301) 57
Moore, R.C., Randell, C. and Westerman, M.
The influence of growth medium on the yield of X-ray-induced chromatid exchanges in the presence and absence of aphidicolin (285) 13
Moore II, D.H., see Tucker, J.D. (301) 19
Morawetz, C., see Favor, J. (284) 53
Morcombe, P., see Ferguson, L.R. (287) 101
Moretti, A., see Vatteroni, L. (291) 163
Morgan, D.G., see Randerath, K. (295) 11
Morgan, W.F., see Lutze, L.H. (299) 225
Morgan, W.F., see Yates, B.L. (285) 53
Mori, M., see Ohsawa, K.-i. (287) 307
Mori, T., Rinaldy, T.L., Athwal, R.S., Kaur, G.P., Nikaido, O., Lloyd, R.S. and Rinaldy, A.

A xeroderma pigmentosum complementation group A related gene: confirmation using monoclonal antibodies against the cyclobutane dimer and (6–4) photoproduct (293) 143
Mori, Y., Iimura, K. and Hirano, K.
N-Benzylimidazole, a potent inducer of rat liver enzymes involved in mutagenic activation of various carcinogens (302) 129
Morichetti, E., see Del Carratore, R. (301) 165
Morimoto, K., see Shibuya, T. (297) 3
Morita, M., see Uno, Y. (298) 269
Morita, T., see Suzuki, M. (301) 125
Morley, A.A., see Dempsey, J.L. (285) 45
Morley, A.A., see Dempsey, J.L. (291) 141
Morris, D.L., see Au, W.W. (300) 273
Morris, S.M.
The genetic toxicology of 5-fluoropyrimidines and 5-chlorouracil (297) 39
Morrison, L.D., Eling, T.E. and Josephy, P.D.
Prostaglandin H synthase-dependent formation of the direct-acting mutagen 2-nitro-3-methylimidazo[4,5-*f*]quinoline (nitro-IQ) from IQ (302) 45
Moses, R.E., see Saito, H. (294) 255
Mosesso, P. and Palitti, F.
The genetic toxicology of 6-mercaptopurine (296) 279
Motejlek, K., Schindler, D., Assum, G. and Krone, W.
Increased amount and contour length distribution of small polydisperse circular DNA (spcDNA) in Fanconi anemia (293) 205
Mothersill, C. and Seymour, C.B.
Recovery of the radiation survival-curve shoulder in CHO-KI, XRS-5 and revertant XRS-5 populations (285) 261
Motz, J., see Coogan, T.P. (293) 39
Moustacchi, E., see Papadopoulo, D. (294) 167
Moustacchi, E., see Sala-Trepat, M. (289) 115
Moyer, R., Briley, D., Johnsen, A., Stewart, U. and Ramsay Shaw, B.
Echinomycin, a bis-intercalating agent, induces C → T mutations via cytosine deamination (288) 291
Moyna, P., see Pasqual, M.S. (286) 243
Muehlbauer, P.A., see Amacher, D.E. (300) 79
Muiras, M.L., Giacomoni, P.U. and Tachon, P.
Modulation of DNA breakage induced via the Fenton reaction (295) 47
Mukherjee, A., Sen, S. and Agarwal, K.
Ciprofloxacin: mammalian DNA topoisomerase type II poison in vivo (301) 87
Muleris, M., see Richard, F. (295) 71
Mullenders, L.H.F., Hazekamp-van Dokkum, A.-M., Kalle, W.H.J., Vrieling, H., Zdzienicka, M.Z. and Van Zeeland, A.A.
UV-induced photolesions, their repair and mutations (299) 271
Müller, H. and Scott, R.
Hereditary conditions in which the loss of heterozygosity may be important (284) 15
Müller, Hj., see Rey, J.-P. (289) 171
Müller, K., Kasper, P. and Müller, L.
An assessment of the in vitro hepatocyte micronucleus assay (292) 213
Müller, L., see Müller, K. (292) 213
Müller, W.-U., see Wuttke, K. (286) 181
Munday, R., Pearson, A. and Ferguson, L.R.
Mouse micronucleus assays of sporidesmin, the toxin associated with facial eczema in ruminants (302) 71
Murota, T., see Shibuya, T. (290) 273
Murphy, J.C., Kaden, D.A., Warren, J. and Sivak, A.
Power frequency electric and magnetic fields: A review of genetic toxicology (296) 221
Musa, A.R., see Chiricolo, M. (295) 105
Musk, S.R.R. and Johnson, I.T.
The clastogenic effects of isothiocyanates (300) 111
Myers, R., see Neel, J.V. (291) 1
Myhr, B.C., see Ashby, J. (292) 25
Myhr, B.C., see Suzuki, T. (285) 221
Mynett, K., see Davies, J.E. (287) 157

Nagai, Y., see Yamao, F. (289) 83
Nagao, M. and Sugimura, T.
Carcinogenic factors in food with relevance to colon cancer development (290) 43
Nagao, M., see Tohda, H. (289) 275
Nagasawa, H., see Kinashi, Y. (285) 253
Nagase, H., see Hamasaki, T. (300) 265
Nagel, R., see Levy, M.S. (293) 241
Nair, P.M., see Kale, H. (298) 17
Nair, P.M., see Kale, H. (298) 9
Nakamura, M., Fort, F.L. and Kikuchi, Y.
Fetal liver micronucleus assay in mice of 5-fluorouracil and related compounds (291) 29
Nakamura, S.-i., see Okai, Y. (303) 63
Nakamuro, K., see Sayato, Y. (300) 207
Nakano, H., see Arimoto, S. (287) 293
Nakatsu, Y., Hattori, K., Hayakawa, H., Shimizu, K. and Sekiguchi, M.
Organization and expression of the human gene for O^6-methylguanine-DNA methyltransferase (293) 119
Nakatsuru, Y., see Aoki, K. (293) 225
Nakayama, T., Hiramitsu, M., Osawa, T. and Kawakishi, S.
The protective role of gallic acid esters in bacterial cytotoxicity and SOS responses induced by hydrogen peroxide (303) 29
Narbonne, J.F., see Michel, X.R. (301) 113
Narváez, Z., see Pérez-Chiesa, Y. (301) 207
Nasim, A. and Hannan, M.A.
Cellular recovery, DNA repair and mutagenesis – a tale of two yeasts (289) 55
Natarajan, A.T., Darroudi, F., Jha, A.N., Meijers, M. and Zdzienicka, M.Z.
Ionizing radiation induced DNA lesions which lead to chromosomal aberrations (299) 297
Natarajan, A.T., Duivenvoorden, W.C.M., Meijers, M. and Zwanenburg, T.S.B.
Induction of mitotic aneuploidy using Chinese hamster primary embryonic cells. Test results of 10 chemicals (287) 47

Natarajan, A.T.
An overview of the results of testing of known or suspected aneugens using mammalian cells in vitro (287) 113
Natarajan, A.T., see Balajee, A.S. (302) 25
Natarajan, A.T., see Domínguez, I. (301) 135
Natarajan, A.T., see Farooqi, Z. (288) 223
Natarajan, A.T., see Jha, A.N. (284) 215
Natarajan, A.T., see Salvadori, D.M.F. (303) 151
Nava, S., see Palma, V. (286) 267
Navarová, J., see Chorvatovičová, D. (302) 207
Navarrete, M.H., see Pincheira, J. (295) 55
Nazzaro-Porro, M., see Grammatico, P. (300) 119
Nechai, V.V., see Verschaeve, L. (287) 253
Neel, J.V., Satoh, C. and Myers, R.
Report of a Workshop on the application of molecular genetics to the study of mutation in the children of atomic bomb survivors (291) 1
Negishi, T., see Hayatsu, H. (290) 79
Nesnow, S., see Ashby, J. (292) 25
Nestmann, E.R., see Ivett, J.L. (298) 43
Netrawali, M.S., see Kale, H. (298) 17
Netrawali, M.S., see Kale, H. (298) 9
Neville, G., see Rogers, C.G. (299) 9
Newcomb, K.O., Sangaiah, R., Gold, A. and Ball, L.M.
Activation and metabolism of benz[*j*]aceanthrylene-9,10-dihydrodiol, the precursor to bay-region metabolism of the genotoxic cyclopenta-PAH benz[*j*]aceanthrylene (287) 181
Nichols, W.W., see Elia, M.C. (291) 193
Nicklas, J.A., see Branda, R.F. (285) 269
Nicolai, M., see Cozzi, R. (299) 37
Nicoletti, B., see Caporossi, D. (290) 265
Niggli, H.J.
Aphidicolin inhibits excision repair of UV-induced pyrimidine photodimers in low serum cultures of mitotic and mitomycin C-induced postmitotic human skin fibroblasts (295) 125
Nikaido, O., see Mori, T. (293) 143
Nilsson, R., see Jha, A.N. (284) 215
Nishi, Y., Hasegawa, M.M. and Inui, N.
Genetic variations in baseline and ultraviolet light-induced sister chromatid exchanges in peritoneal lymphocytes among different mouse strains (286) 145
Nivard, M.J.M., see Ballering, L.A.P. (285) 211
Nocentini, S.
Cellular responses to hematoporphyrin-induced photooxidative damage in Fanconi anemia, xeroderma pigmentosum and normal human fibroblasts (284) 275
Noditi, M., see Jha, A.N. (284) 215
Nohmi, T., see Hagiwara, Y. (291) 171
Nohmi, T., see Watanabe, M. (301) 7
Nomura, T., see Tanaka, T. (288) 277
North, P., see Ganesh, A. (299) 251
Nunes, E., Candreva, E.C., Keszenman, D. and Salvo, V.A.
The mutagenic effect of elevated temperatures in yeast is blocked by a previous heat shock (289) 165
Nylund, L., see Lähdetie, J. (300) 37

Obaseiki-Ebor, E.E., Odukoya, K., Telikepalli, H., Mitscher, L.A. and Shankel, D.M.
Antimutagenic activity of extracts of leaves of four common edible vegetable plants in Nigeria (West Africa) (302) 109
Obe, G., Johannes, C., Werthmann, I. and Folle, G.A.
Chromatid-type aberrations induced by *Alu*I in Chinese hamster ovary cells (299) 305
Obe, G., see Boes, R. (292) 225
Obe, G., see Zwingelberg, R. (302) 39
Oberly, T.J., Scheuring, J.C., Richardson, K.A., Richardson, F.C. and Garriott, M.L.
The evaluation of methapyrilene for bacterial mutation with metabolic activation by Aroclor-induced, methapyrilene-induced and noninduced rat-liver S9 (299) 77
Oda, T., Sakakibara, Y., Ichinoseki, K., Aizu-Yokota, E. and Sato, Y.
Effects of (+)-, (−)- and (±)-indenestrols A and B on microtubule distribution and cytotoxicity in Chinese hamster V79 cells (289) 223
Oda, Y., see Hagiwara, Y. (291) 171
Odagiri, Y., see Dempsey, J.L. (285) 45
O'Donovan, M.R., see Beare, D.M. (291) 207
Odukoya, K., see Obaseiki-Ebor, E.E. (302) 109
Oesch, F., see Krämer, A. (290) 165
Ohnishi, K., see Honma, M. (286) 165
Ohnishi, Y., see Higashimoto, M. (303) 135
Ohnishi, Y., see Tokiwa, H. (297) 181
Ohsawa, K.-i., Furihata, C., Mori, M. and Ikui, E.
Ability of *N*-methyl-*N'*-nitro-*N*-nitrosoguanidine, 4-nitroquinoline 1-oxide, dimethylnitrosamine, and NaCl to induce unscheduled DNA synthesis, stimulate replicative DNA synthesis, and produce DNA single-strand breaks in pyloric mucosa of rat stomach (287) 307
Ohta, T., see Mano, H. (290) 303
Ohta, T., see Matsumura, H. (298) 163
Ohta, T., see Watanabe, K. (302) 13
Ohta, T., see Yamada, T. (286) 293
Ohta, Y., see Zhang, X.B. (298) 247
Ohta, Y., see Zhang, X.B. (300) 201
Oikawa, A., see Tohda, H. (289) 275
Oka, Y., see Tanaka, T. (288) 277
Okai, Y., Higashi-Okai, K. and Nakamura, S.-i.
Identification of heterogenous antimutagenic activities in the extract of edible brown seaweeds, *Laminaria japonica* (Makonbu) and *Undaria pinnatifida* (Wakame) by the *umu* gene expression system in *Salmonella typhimurium* (TA1535/pSK1002) (303) 63
Okayasu, R., Pantelias, G.E. and Iliakis, G.
Increased frequency of formation of interphase ring-chromosomes in radiosensitive *irs-1* cells exposed to X-rays (294) 199
Oktyabrsky, O.N., Golyasnaya, N.V., Smirnova, G.V., Demakov, V.A., Posokhina, N.K. and Kholstova, T.A.
Acidification of *Escherichia coli* and *Salmonella typhimurium* cytoplasm reduces the mutagenic effect of *N*-methyl-*N'*-nitro-*N*-nitrosoguanidine (293) 197
Okumura, Y., see Kodama, S. (293) 31
Oliva, J., see Rutledge, J.C. (296) 167
Olive, P.L. and Banáth, J.P.
Induction and rejoining of radiation-induced DNA single-strand breaks: "tail moment" as a function of position in the cell cycle (294) 275

Olive, P.L., see Ward, A.J. (294) 299
Oller, A.R., Fijalkowska, I.J. and Schaaper, R.M.
The *Escherichia coli galK2* papillation assay: its specificity and application to seven newly isolated mutator strains (292) 175
Olvera, O., Zimmering, S., Arceo, C. and Cruces, M.
The protective effects of chlorophyllin in treatment with chromium(VI) oxide in somatic cells of Drosophila (301) 201
Omura, M., Inamasu, T. and Ishinishi, N.
Mutagenic activity of the leachate of municipal solid waste landfill (298) 125
O'Neill, I., Ridgway, O., Ellul, A. and Bingham, S.
Gastrointestinal monitoring of DNA-damaging agents with magnetic microcapsules (290) 127
O'Neill, J.P., see Branda, R.F. (285) 269
Önfelt, A., see Burvall, K. (285) 289
Ono, T., see Miyamura, Y. (295) 63
Oppliger, T., Würgler, F.E. and Sengstag, C.
A plasmid system to monitor gene conversion and reciprocal recombination in vitro (291) 181
Ord, R.W., see Von Borstel, R.C. (289) 97
Orsini, S., see Salvi, R. (291) 213
Ortiz, T., see Cortés, F. (303) 71
Ortner, A., see Eckl, P.M. (290) 183
Osawa, T., see Nakayama, T. (303) 29
Osawa, T., see Yamada, T. (286) 293
Oshimura, M., see Kodama, S. (293) 31
Osipova, G.Yu., see Anisimov, V.N. (295) 113
Osmak, M., Beketić-Orešković, L., Matulić, M. and Sorić, J.
Resistance of human larynx carcinoma cells to cisplatin, γ-irradiation and methotrexate does not involve overexpression of c-*myc* or c-Ki-*ras* oncogenes (303) 113
Osorio, S., see Sinsheimer, J.E. (298) 197
Osterburg, H.H., see Randerath, K. (295) 11
Ostermann, K., see Schlake, C. (294) 59
Ostrosky, P., see Palma, V. (286) 267
Ostrosky-Wegman, P., see Espinosa-Aguirre, J.J. (300) 151
Ostrosky-Wegman, P., see Espinosa-Aguirre, J.J. (303) 55
Ostrosky-Wegman, P., see Herrera, L.A. (303) 121
Ottaggio, L., Bonatti, S., Cavalieri, Z. and Abbondandolo, A.
Chromosomes bearing amplified genes are a preferential target of chemicals inducing chromosome breakage and aneuploidy (301) 149
Øvrebø, S., see Kristensen, P. (302) 33
Owais, W.M.
The lack of L-azidoalanine interaction with DNA. In vitro studies (302) 147
Ozawa, S., see Ando, M. (292) 155

Pacchierotti, F., see Leopardi, P. (287) 119
Palitti, F., Cortés, F., Bassi, L., Di Chiara, D., Fiore, M. and Pinero, J.
Higher G2 sensitivity to the induction of chromosomal damage in the CHO mutant EM9 than in its parental line AA8 by camptothecin, an inhibitor of DNA topoisomerase I (285) 283
Palitti, F., see Caporossi, D. (290) 265
Palitti, F., see Cortés, F. (288) 281
Palitti, F., see Mosesso, P. (296) 279
Palma, V., Tudón, H., Buentello, L., Nava, S., Ostrosky, P. and Salamanca, F.
Methods for the analysis of cellular kinetics in PHA-stimulated blood lymphocytes using BrdU incorporation. A comparative study (286) 267
Panda, B.B., see Subhadra, A.V. (300) 141
Panda, K.K., see Subhadra, A.V. (300) 141
Panneerselvam, N., see Domínguez, I. (301) 135
Pantelias, G.E., see Okayasu, R. (294) 199
Paoletti, I., see Foresti, M. (294) 69
Papadopoulo, D., Laquerbe, A., Guillouf, C. and Moustacchi, E.
Molecular spectrum of mutations induced at the *HPRT* locus by a cross-linking agent in human cell lines with different repair capacities (294) 167
Papadopoulo, D., see Sala-Trepat, M. (289) 115
Parada, R. and Jaszczak, K.
A cytogenetic study of cows from a highly industrial or an agricultural region (300) 259
Pariani, S., see Salvi, R. (291) 213
Parke, D.V., see Lewis, D.F.V. (291) 61
Parker, L., see Dearfield, K.L. (301) 57
Parrini, M., see Bolognesi, C. (285) 241
Parry, E.M., see Ellard, S. (287) 87
Parry, E.M., see Warr, T.J. (287) 29
Parry, J.M. and Sors, A.
The detection and assessment of the aneugenic potential of environmental chemicals: the European Community Aneuploidy Project (287) 3
Parry, J.M.
An evaluation of the use of in vitro tubulin polymerisation, fungal and wheat assays to detect the activity of potential chemical aneugens (287) 23
Parry, J.M., see Ashby, J. (292) 25
Parry, J.M., see Lynch, A.M. (287) 71
Parry, J.M., see Warr, T.J. (287) 29
Parshad, R., Tarone, R.E., Price, F.M. and Sanford, K.K.
Cytogenetic evidence for differences in DNA incision activity in xeroderma pigmentosum group A, C and D cells after X-irradiation during G_2 phase (294) 149
Parvinen, M., see Hakovirta, H. (301) 189
Pasqual, M.S., Lauer, C.P., Moyna, P. and Henriques, J.A.P.
Genotoxicity of the isoquinoline alkaloid berberine in prokaryotic and eukaryotic organisms (286) 243
Pathak, D.N. and Roy, D.
In vivo genotoxicity of sodium *ortho*-phenylphenol: phenylbenzoquinone is one of the DNA-binding metabolite(s) of sodium *ortho*-phenylphenol (286) 309
Patierno, S.R., Dirscherl, L.A. and Xu, J.
Transformation of rat tracheal epithelial cells to immortal growth variants by particulate and soluble nickel compounds (300) 179
Paton, D., see Ashby, J. (286) 3
Paton, D., see Ashby, J. (292) 25
Pavanello, S., see Celotti, L. (294) 117
Peacock, J., see Powell, S. (294) 9
Pearson, A., see Munday, R. (302) 71
Pedersen, L.H., see Rank, J. (300) 29
Pegram, R.A., see Shaddock, J.G. (295) 19
Peiser, C., Riebe-Imre, M., Emura, M. and Mohr, U.

Influence of culture passages on growth kinetics, xenobiotic metabolism, chromosomal stability and transformation in a clonal fetal hamster lung epithelial cell line (289) 281
Pellerano, P., see Taningher, M. (301) 275
Pellicer, J.A., see Rodilla, V. (291) 35
Pence, B.C.
Role of calcium in colon cancer prevention: Experimental and clinical studies (290) 87
Pérez-Chiesa, Y. and Narváez, Z.
Evaluation of genotoxicity of the indenoisoquinoline analogues of fagaronine and nitidine in *Drosophila melanogaster* (301) 207
Pérez-Chiesa, Y. and Rodríguez, A.
Absence of mutagenicity of benzo[*c*]phenanthridine alkaloids in somatic cells of *Drosophila melanogaster*: Comparison with 7,12-dimethylbenz[*a*]anthracene and chrysene (298) 277
Perin, F., see Averbeck, D. (287) 165
Perreault, S.D.
Chromatin remodeling in mammalian zygotes (296) 43
Perry, P., see Slavotinek, A. (303) 11
Perticone, P., see Cozzi, R. (299) 37
Pertusa, J., see Rodilla, V. (291) 35
Pfeifer, G.P., Drouin, R. and Holmquist, G.P.
Detection of DNA adducts at the DNA sequence level by ligation-mediated PCR (288) 39
Pfeiffer, M., see Dempsey, J.L. (291) 141
Pflaum, M., see Epe, B. (299) 135
Pfohl-Leszkowicz, A., Grosse, Y., Kane, A., Creppy, E.E. and Dirheimer, G.
Differential DNA adduct formation and disappearance in three mouse tissues after treatment with the mycotoxin ochratoxin A (289) 265
Phillips, B.J., see Davies, M.J. (290) 145
Phillips, B.J., see Davies, M.J. (291) 117
Piantanida, M., see Salvi, R. (291) 213
Picardo, M., see Grammatico, P. (300) 119
Pienkowska, M., Glickman, B.W., Ferreira, A., Anderson, M. and Zielenska, M.
Large-scale mutational analysis of EMS-induced mutation in the *lacI* gene of *Escherichia coli* (288) 123
Pincheira, J., Gallo, C., Bravo, M., Navarrete, M.H. and Lopez-Saez, J.F.
G_2 repair and aging: influence of donor age on chromosomal aberrations in human lymphocytes (295) 55
Piñero, J. and Cortés, F.
Abnormally high incidence of SCE in three successive cell cycles in the CHO mutant EM9 as detected by a three-way immunoperoxidase differential staining (292) 205
Piñero, J., see Cortés, F. (288) 281
Piñero, J., see Cortés, F. (303) 71
Pinero, J., see Palitti, F. (285) 283
Pinton, A., see Martins, M.B. (285) 231
Pinton, P., see Sabatier, L. (284) 257
Piras, A., see Vatteroni, L. (291) 163
Pires, V., see Rueff, J. (289) 197
Plewa, M.J., see Gichner, T. (300) 57
Plewa, M.J., see Seo, K.-Y. (299) 111
Podstavková, S., Vlček, D. and Miadoková, E.
New DNA repair-deficient mutants of *Chlamydomonas reinhardtii* (293) 65
Podstavková, S., see Vlčková, V. (302) 153
Poirier, M.C.
Antisera specific for carcinogen–DNA adducts and carcinogen-modified DNA: Applications for detection of xenobiotics in biological samples (288) 31
Polaina, J., see Lopez-Camacho, C. (301) 73
Polasa, K., see Averbeck, D. (287) 165
Poli, P., Buschini, A., Campanini, N., Vettori, M.V., Cassoni, F., Cattani, S. and Rossi, C.
Urban air pollution: Use of different mutagenicity assays to evaluate environmental genetic hazard (298) 113
Pool-Zobel, B.L., see McKelvey-Martin, V.J. (288) 47
Poot, M., see Rünger, T.M. (293) 47
Porfirio, B., see Caporossi, D. (290) 265
Posokhina, N.K., see Oktyabrsky, O.N. (293) 197
Pourzand, C. and Cerutti, P.
Genotypic mutation analysis by RFLP/PCR (288) 113
Powell, S., Whitaker, S., Peacock, J. and McMillan, T.
Ataxia telangiectasia: An investigation of the repair defect in the cell line AT5BIVA by plasmid reconstitution (294) 9
Preussmann, R., see Erdinger, L. (292) 41
Price, F.M., see Parshad, R. (294) 149
Prieur, M., see Richard, F. (295) 71
Provost, G.S., Hamner, R.T., Kretz, P.L. and Short, J.M.
Response to the Commentary Article: Comparison of mutation frequencies obtained using transgenes and the specific-locus mutation system in male mouse-germ cells (298) 145
Provost, G.S., Kretz, P.L., Hamner, R.T., Matthews, C.D., Rogers, B.J., Lundberg, K.S., Dycaico, M.J. and Short, J.M.
Transgenic systems for in vivo mutation analysis (288) 133
Provost, G.S., see Lundberg, K.S. (301) 99
Pudil, J., see Krämer, A. (290) 165
Pueyo, M., Gibert, I. and Barbé, J.
Relationship between the functional regions of the RecA protein and ATP hydrolysis in UV-irradiated *Escherichia coli* cells (293) 21
Purintrapiban, J., see Higashimoto, M. (303) 135
Putman, K.L., see Randerath, K. (295) 11

Qadri, S.A., Islam, S. and Ahmad, M.
Mutagenic activity of oxathiolane steroids: structural requirement for the genotoxic activity in Salmonella and *E. coli* (298) 53
Qu, Y.H., Xu, G.X., Zhou, J.Z., Chen, T.D., Zhu, L.F., Shields, P.G., Wang, H.W. and Gao, Y.T.
Genotoxicity of heated cooking oil vapors (298) 105
Quest, J.A., see Dearfield, K.L. (297) 197
Quillardet, P. and Hofnung, M.
The SOS chromotest: a review (297) 235

Raabe, F., Janz, S., Wolff, G., Merten, H., Landrock, A., Birkenfeld, T. and Herzschuh, R.
Genotoxicity assessment of waste products of aluminum plasma etching with the SOS chromotest (300) 99

Raabe, O.G., see Straume, T. (287) 243
Racine, J.-F., Zhu, Y. and Mamet-Bratley, M.D.
Mechanism of toxicity of 3-methyladenine for bacteriophage T7 (294) 285
Radloff, R.J., see Cheng, R. (294) 223
Rafferty, C., see McCann, J. (297) 61
Rahiman, M.A., see Shyama, S.K. (300) 215
Rahman, Q., see Aslam, M. (300) 45
Rai, H., see Arimoto, S. (287) 293
Rainaldi, G., see Vatteroni, L. (291) 163
Ramsay Shaw, B., see Moyer, R. (288) 291
Randell, C., see Moore, R.C. (285) 13
Randerath, E., see Chang, J. (291) 147
Randerath, E., see Randerath, K. (295) 247
Randerath, E., see Randerath, K. (295) 31
Randerath, K., Hart, R.W., Zhou, G.-D., Reddy, R., Danna, T.F. and Randerath, E.
Enhancement of age-related increases in DNA I-compound levels by calorie restriction: comparison of male B-N and F-344 rats (295) 31
Randerath, K., Putman, K.L., Osterburg, H.H., Johnson, S.A., Morgan, D.G. and Finch, C.E.
Age-dependent increases of DNA adducts (I-compounds) in human and rat brain DNA (295) 11
Randerath, K., Zhou, G.-D., Hart, R.W., Turturro, A. and Randerath, E.
Biomarkers of aging: correlation of DNA I-compound levels with median lifespan of calorically restricted and ad libitum fed rats and mice (295) 247
Randerath, K., see Chang, J. (291) 147
Ranjbar, S. and Hannigan, B.M.
DNA damage in human T-lymphoblastoid cell line Molt-3 induced by reactive oxygen species (285) 227
Rank, J., Jensen, A.-G., Skov, B., Pedersen, L.H. and Jensen, K.
Genotoxicity testing of the herbicide Roundup and its active ingredient glyphosate isopropylamine using the mouse bone marrow micronucleus test, Salmonella mutagenicity test, and Allium anaphase-telophase test (300) 29
Rannug, A., see Carstensen, U. (289) 187
Rauchfuss, H.S., see Liechty, M.C. (286) 299
Rault, S., see André, V. (299) 63
Rauscher, R., see Edenharder, R. (287) 261
Ravanat, J.-L., see Averbeck, D. (287) 165
Ray, F.A., Meyne, J. and Kraemer, P.M.
SV40 T antigen induced chromosomal changes reflect a process that is both clastogenic and aneuploidogenic and is ongoing throughout neoplastic progression of human fibroblasts (284) 265
Ray, V.A., see Amacher, D.E. (300) 79
Razdan, R., see Erdinger, L. (292) 41
Reddy, R., see Randerath, K. (295) 31
Reed, E., see Dabholkar, M. (293) 151
Reid, T.M. and Loeb, L.A.
Effect of DNA-repair enzymes on mutagenesis by oxygen free radicals (289) 181
Reigosa, M.A., see Larramendy, M.L. (292) 165
Reinhart, L., see Chen, W. (287) 227
Reisenbichler, H. and Eckl, P.M.
Genotoxic effects of selected peroxisome proliferators (286) 135
Ren, L., Zhang, H., Yang, J. and Zhang, Z.
A sequential study on the use of the cytokinesis-block micronucleus method in mouse splenocytes (301) 223
Retèl, J., Hoebee, B., Braun, J.E.F., Lutgerink, J.T., Van den Akker, E., Wanamarta, A.H., Joenje, H. and Lafleur, M.V.M.
Mutational specificity of oxidative DNA damage (299) 165
Retèl, J., see Braun, J.E.F. (289) 255
Retèl, J., see Lafleur, M.V.M. (295) 1
Rey, J.-P., Scott, R. and Müller, Hj.
Induction and removal of interstrand crosslinks in the ribosomal RNA genes of lymphoblastoid cell lines from patients with Fanconi anemia (289) 171
Reyes, R.E., see Espinosa-Aguirre, J.J. (303) 55
Ribas, M., see Barquinero, J.F. (286) 275
Ribeiro, L.R., Silva, A.R., Bautista, A.R.P.L., Costa, S.L., Sales, L.A., Rios, A.C.C. and Salvadori, D.M.F.
Clastogenic effect of extracts obtained from *Crotalaria retusa* L. and *Crotalaria mucronata* Desv. on mouse bone marrow cells (300) 253
Ribeiro, L.R., see Salvadori, D.M.F. (303) 151
Richard, F., Aurias, A., Couturier, J., Dutrillaux, A.-M., Flüry-Hérard, A., Gerbault-Seureau, M., Hoffschir, F., Lamoliatte, E., Lefrançois, D., Lombard, M., Muleris, M., Prieur, M., Ricoul, M., Sabatier, L., Viegas-Péquignot, E., Volobouev, V. and Dutrillaux, B.
Aneuploidy in human lymphocytes: an extensive study of eight individuals of various ages (295) 71
Richard, P., see Sala-Trepat, M. (289) 115
Richardson, A., see Haley-Zitlin, V. (295) 237
Richardson, F.C., see Oberly, T.J. (299) 77
Richardson, K.A., see Oberly, T.J. (299) 77
Richer, C.-L., see Zhang, X.-X. (302) 213
Ricoul, M., see Martins, M.B. (285) 231
Ricoul, M., see Richard, F. (295) 71
Ridanpää, M., see Burvall, K. (285) 289
Ridgway, O., see O'Neill, I. (290) 127
Riebe-Imre, M., see Peiser, C. (289) 281
Rieger, R. and Michaelis, A.
Combined application of MH and TEM for conditioning treatment simultaneously triggers two protective functions against induction of chromatid aberrations in *Vicia faba* root tip meristem cells (302) 161
Rieger, R., see Michaelis, A. (302) 157
Riley, J., see Seo, K.-Y. (299) 111
Rinaldy, A., see Mori, T. (293) 143
Rinaldy, T.L., see Mori, T. (293) 143
Rinchik, E.M., Stoye, J.P., Frankel, W.N., Coffin, J., Kwon, B.S. and Russell, L.B.
Molecular analysis of viable spontaneous and radiation-induced albino (*c*)-locus mutations in the mouse (286) 199
Rinchik, E.M., see Russell, L.B. (288) 187
Rios, A.C.C., see Ribeiro, L.R. (300) 253
Ripley, L.S., see Brown, M.D. (286) 189
Ritzel, R.G., see Von Borstel, R.C. (289) 97
Robba, M., see André, V. (299) 63
Roberton, A.M.

Roles of endogenous substances and bacteria in colorectal cancer (290) 71
Rodilla, V., Pellicer, J.A., Serrano, A. and Pertusa, J.
Possible relationship between micronucleated and binucleated cells induced by cisplatin in cultured CHO cells (291) 35
Rodilla, V.
Origin and evolution of binucleated cells and binucleated cells with micronuclei in cisplatin-treated CHO cultures (300) 281
Rodríguez, A., see Pérez-Chiesa, Y. (298) 277
Rogers, B.J., see Provost, G.S. (288) 133
Rogers, C.G., Boyes, B.G., Matula, T.I., Neville, G. and Stapley, R.
Cytotoxic and genotoxic properties of *tert.*-butyl-*p*-quinone (TBQ) in an in vitro assay system with Chinese hamster V79 cells and in strain D7 of *Saccharomyces cerevisiae* (299) 9
Rogers, J.A., see Krishnaswamy, S. (288) 311
Röscheisen, C., see Köberle, B. (301) 65
Rosenkranz, H.S. and Klopman, G.
A dichotomy between lipophilicity and in vivo and in vitro genotoxicity (291) 135
Rosenkranz, H.S. and Klopman, G.
Structural evidence for a dichotomy in rodent carcinogenesis: Involvement of genetic and cellular toxicity (303) 83
Rosenkranz, H.S.
Revisiting the role of mutagenesis in the induction of lung cancers in rats by diesel emissions (303) 91
Rosenkranz, H.S., see Ashby, J. (292) 25
Rosenthal, M., see Zwingelberg, R. (302) 39
Rosin, M.P., see Anwar, W.A. (298) 179
Rosin, M.P., see Ward, A.J. (294) 299
Rossella, F., see Salvi, R. (291) 213
Rossi, C., see Poli, P. (298) 113
Rossman, T.G., see Roy, N.K. (298) 97
Rougée, M., see Averbeck, D. (287) 165
Routledge, M.N., see King, M.M. (292) 113
Rowley, G., see Steingrimsdottir, H. (294) 29
Roy, D., see Pathak, D.N. (286) 309
Roy, N.K. and Rossman, T.G.
Mutagenesis and comutagenesis by lead compounds (298) 97
Roy (Pal), M., Sengupta, S., Bhattacharyya, N.P., Dey, S.K. and Bhattacharjee, S.B.
Response of MTX-resistant V79 cells to some DNA-damaging agents (285) 201
Roy (Pal), M., Sengupta, S., Ghosh, R., Bhattacharyya, N.P., Dey, S.K. and Bhattacharjee, S.B.
Characterisation of methotrexate-resistant clones (291) 43
Rożek, M., see Rudek, Z. (298) 25
Rubio, J., see Espinosa-Aguirre, J.J. (300) 151
Rubio, J., see Espinosa-Aguirre, J.J. (303) 55
Rudek, Z. and Rożek, M.
Induction of micronuclei in tadpoles of *Rana temporaria* and *Xenopus laevis* by the pyrethroid Fastac 10 EC (298) 25
Rueff, J., Brás, A., Cristóvão, L., Mexia, J., Sá da Costa, M. and Pires, V.
DNA strand breaks and chromosomal aberrations induced by H_2O_2 and ^{60}Co γ-radiation (289) 197
Rumsby, P.C., see Davies, M.J. (290) 145
Rumsby, P.C., see Davies, M.J. (291) 117
Rünger, T.M., Poot, M. and Kraemer, K.H.
Abnormal processing of transfected plasmid DNA in cells from patients with ataxia telangiectasia (293) 47
Russell, L.B. and Rinchik, E.M.
Structural differences between specific-locus mutations induced by different exposure regimes in mouse spermatogonial stem cells (288) 187
Russell, L.B. and Russell, W.L.
Frequency and nature of specific-locus mutations induced in female mice by radiations and chemicals: a review (296) 107
Russell, L.B., see Rinchik, E.M. (286) 199
Russell, W.L., see Russell, L.B. (296) 107
Russo, A., Dorigo, E., Stocco, A. and Majone, F.
Persistence of chromosomal lesions induced in mouse bone marrow cells by mitomycin C, as evaluated by SCE analysis (287) 275
Rutledge, J.C., Generoso, W.M., Shourbaji, A., Cain, K.T., Gans, M. and Oliva, J.
Developmental anomalies derived from exposure of zygotes and first-cleavage embryos to mutagens (296) 167
Rutledge, J.C., see Sudman, P.D. (296) 143

Sabatier, L., Martin, M., Crechet, F., Pinton, P. and Dutrillaux, B.
Chromosomal anomalies in radiation-induced fibrosis in the pig (284) 257
Sabatier, L., see Martins, M.B. (285) 231
Sabatier, L., see Richard, F. (295) 71
Sá da Costa, M., see Rueff, J. (289) 197
Sadamori, N., see Honda, T. (291) 125
Sage, E., see Boiteux, S. (294) 43
Sage, E., see Drobetsky, E.A. (289) 131
Sahlén, S., see Steen, A.-M. (286) 209
Sahota, A., see Chen, J. (287) 217
Saito, H., Hammond, A.T. and Moses, R.E.
Hypersensitivity to oxygen is a uniform and secondary defect in Fanconi anemia cells (294) 255
Sakagami, H., see Lee, H. (297) 53
Sakakibara, Y., see Oda, T. (289) 223
Sakamoto, Y., see Fujikawa, K. (290) 175
Sakurai, H., see Miyamura, Y. (295) 63
Sakurai, J., see Aoki, K. (293) 225
Sala-Trepat, M., Boyse, J., Richard, P., Papadopoulo, D. and Moustacchi, E.
Frequencies of *HPRT*$^-$ lymphocytes and glycophorin A variants erythrocytes in Fanconi anemia patients, their parents and control donors (289) 115
Salamanca, F., see Palma, V. (286) 267
Salanitto, A., see Bolognesi, C. (285) 241
Sales, L.A., see Ribeiro, L.R. (300) 253
Salles, B., see Bouayadi, K. (294) 77
Salonen, K. and Lähdetie, J.

No effect of maternal smoking in early pregnancy observed on chromosome aberrations in chorionic villus samples (298) 285
Salvadori, D.M.F., Ribeiro, L.R. and Natarajan, A.T.
The anticlastogenicity of β-carotene evaluated on human hepatoma cells (303) 151
Salvadori, D.M.F., see Ribeiro, L.R. (300) 253
Salvi, R., De Andreis, C., Pariani, S., Orsini, S., Piantanida, M., Rossella, F. and Simoni, G.
Frequency of chromosomal aberrations after exposure to γ-radiation of human chorionic villi (291) 213
Salvo, V.A., see Nunes, E. (289) 165
Samejima, K., see Fujikawa, K. (290) 175
Sampson, K.S., see Burkhart, J.G. (292) 69
Sanderson, B.J.S. and Clark, A.M.
Micronuclei in adult and foetal mice exposed in vivo to heliotrine, urethane, monocrotaline and benzidine (285) 27
Šandula, J., see Chorvatovičová, D. (302) 207
Sanford, K.K., see Parshad, R. (294) 149
Sangaiah, R., see Newcomb, K.O. (287) 181
Sankaranarayanan, K., see Jongmans, W. (294) 207
Sano, Y., see Katoh, Y. (300) 49
Sarasin, A., see Cabral-Neto, J.B. (288) 249
Sarkar, D., Sharma, A. and Talukder, G.
Differential protection of chlorophyllin against clastogenic effects of chromium and chlordane in mouse bone marrow in vivo (301) 33
Sarma, L., see Abraham, S.K. (303) 109
Sasaki, Y.F. and Shirasu, Y.
Suppressing effects of S phase post-treatment with carbolines on sister-chromatid exchanges induced by mitomycin C in Chinese hamster cells (302) 165
Sasaki, Y.F., Yamada, H., Shimoi, K., Kator, K. and Kinae, N.
The clastogen-suppressing effects of green tea, Po-lei tea and Rooibos tea in CHO cells and mice (286) 221
Sasaki, Y.F., Yamada, H., Sugiyama, C. and Kinae, N.
Increasing effect of tri-*n*-butyltins and triphenyltins on the frequency of chemically induced chromosome aberrations in cultured Chinese hamster cells (300) 5
Sasaki, Y.F., see Yamada, H. (290) 281
Sasaki, Y.F., see Yamada, H. (301) 195
Sasaki, Y.F., see Yamada, H. (302) 137
Sąsiadek, M.
Sister-chromatid exchanges and cell-cycle kinetics in the lymphocytes of workers occupationally exposed to a chemical mixture in the tyre industry (302) 197
Sasikala, K., see Balaji, M. (301) 13
Sato, A., see Aoki, K. (293) 225
Sato, K., see Warters, R.L. (293) 91
Sato, S.-i., Takizawa, H. and Inui, N.
Mouse strain differences in induction of micronuclei by base analogues and nucleosides (301) 45
Sato, T., see Hamasaki, T. (300) 265
Sato, Y., see Oda, T. (289) 223
Satoh, C., see Neel, J.V. (291) 1
Saturnino, C., see André, V. (299) 63
Savage, E.A., see Von Borstel, R.C. (289) 97
Sayato, Y., Nakamuro, K., Ueno, H. and Goto, R.
Identification of polycyclic aromatic hydrocarbons in mutagenic adsorbates to a copper-phthalocyanine derivative recovered from municipal river water (300) 207
Sbrana, I., Di Sibio, A., Lomi, A. and Scarcelli, V.
C-Mitosis and numerical chromosome aberration analyses in human lymphocytes: 10 known or suspected spindle poisons (287) 57
Scapoli, C., see Barale, R. (300) 15
Scarabelli, L., Giannoni, P., Malfatto, C., Bolognesi, C. and Cesarone, C.F.
Relationship between poly(ADP-ribose) polymerase activity and DNA damage induced by zinc dithiocarbamates in mouse and rat liver (302) 1
Scarcelli, V., see Sbrana, I. (287) 57
Scarfì, M.R., Lioi, M.B., Di Berardino, D., Zeni, O., Coviello, A.M.R. and Matassino, D.
Measurement of micronuclei by cytokinesis-block method in bovine lymphocytes (289) 291
Scarpa, S., see Grammatico, P. (300) 119
Scearce, L.M. and Masker, W.
Deletion between direct repeats in bacteriophage T7 gene 1.2 (288) 301
Schaaper, R.M., see Oller, A.R. (292) 175
Scheuring, J.C., see Oberly, T.J. (299) 77
Schiestl, R.H. and Wintersberger, U.
DNA damage induced mating type switching in *Saccharomyces cerevisiae* (284) 111
Schiffmann, D., see Herrera, L.A. (303) 121
Schiffmann, D., see Stopper, H. (300) 165
Schimke, R.T., see Hoy, C.A. (290) 217
Schindler, D., see Motejlek, K. (293) 205
Schlake, C., Ostermann, K., Schmidt, H. and Gutz, H.
Analysis of DNA repair pathways of *Schizosaccharomyces pombe* by means of *swi-rad* double mutants (294) 59
Schlatter, C., see Shephard, S.E. (302) 91
Schmezer, P., see Erdinger, L. (292) 41
Schmezer, P., see McKelvey-Martin, V.J. (288) 47
Schmid, E., see Adler, I.-D. (301) 249
Schmidt, H., see Schlake, C. (294) 59
Schott, G., see Grummt, T. (302) 19
Schroeder, M.D., see Srivastava, V.K. (295) 265
Schulte-Frohlinde, D., Worm, K.-H. and Merz, M.
Double-strand breaks in plasmid DNA and the induction of deletions (299) 233
Schulte-Hermann, R., see Knasmüller, S. (299) 45
Schultz, G.A. and Heyner, S.
Gene expression in pre-implantation mammalian embryos (296) 17
Schwarze, P.E., see Becher, R. (285) 305
Scott, D., see Vořechovský, I. (290) 255
Scott, R., see Müller, H. (284) 15
Scott, R., see Rey, J.-P. (289) 171
Sedgwick, B., see Vaughan, P. (293) 249
Sedwick, W.D., see Anderson, R.D. (288) 181
Sedwick, W.D., see Anderson, R.D. (294) 215
Seelbach, A., Fissler, B. and Madle, S.
Further evaluation of a modified micronucleus assay with V79 cells for detection of aneugenic effects (303) 163
Sekiguchi, M., see Nakatsu, Y. (293) 119

Sekiya, T.
Detection of mutant sequences by single-strand conformation polymorphism analysis (288) 79
Sen, S., see Mukherjee, A. (301) 87
Seng, J.E., see Manjgaladze, M. (295) 201
Sengstag, C., see Oppliger, T. (291) 181
Sengstag, C., see Shephard, S.E. (302) 91
Sengupta, S., see Roy (Pal), M. (285) 201
Sengupta, S., see Roy (Pal), M. (291) 43
Seno, T., see Yamao, F. (289) 83
Seo, K.-Y., Riley, J., Cortez, D., Wagner, E.D. and Plewa, M.J.
Characterization of stable high molecular weight mutagenic product(s) of plant-activated *m*-phenylenediamine (299) 111
Sera, N., see Matsuoka, A. (298) 255
Serrano, A., see Rodilla, V. (291) 35
Severin, K., see Mertens, R. (300) 195
Seymour, C.B., see Mothersill, C. (285) 261
Shacter, E., see Janz, S. (293) 173
Shaddock, J.G., Feuers, R.J., Chou, M.W. and Casciano, D.A.
Evidence that DNA repair may not be modified by age or chronic caloric restriction (301) 261
Shaddock, J.G., Feuers, R.J., Chou, M.W., Pegram, R.A. and Casciano, D.A.
Effects of aging and caloric restriction on the genotoxicity of four carcinogens in the in vitro rat hepatocyte/DNA repair assay (295) 19
Shadley, J.D. and Dai, G.
Evidence that the adaptive response of human lymphocytes to ionizing radiation acts on lethal damage in non-aberrant cells (301) 171
Shane, B.S., Gutenmann, W.H. and Lisk, D.J.
Variability over time in the mutagenicity of ashes from municipal solid-waste incinerators (301) 39
Shankel, D.M., see Obaseiki-Ebor, E.E. (302) 109
Shanower, G.A., see Kantor, G.J. (293) 55
Sharma, A., see Sarkar, D. (301) 33
Sharma, N., see Fitt, P.S. (302) 53
Shelby, M.D., see Lewis, S.E. (296) 129
Shephard, S.E., Sengstag, C., Lutz, W.K. and Schlatter, C.
Mutations in liver DNA of *lacI* transgenic mice (Big Blue) following subchronic exposure to 2-acetylaminofluorene (302) 91
Shibuya, T. and Morimoto, K.
A review of the genotoxicity of 1-ethyl-1-nitrosourea (297) 3
Shibuya, T., Murota, T., Horiya, N., Matsuda, H. and Hara, T.
The induction of recessive mutations in mouse primordial germ cells with *N*-ethyl-*N*-nitrosourea (290) 273
Shields, P.G., see Qu, Y.H. (298) 105
Shimada, T., Yamazaki, H., Mimura, M. and Guengerich, F.P.
Rat pulmonary microsomal cytochrome P-450 enzymes involved in the activation of procarcinogens (284) 233
Shimizu, K., see Nakatsu, Y. (293) 119
Shimoi, K., see Sasaki, Y.F. (286) 221
Shindo, Y., see Ando, M. (292) 155
Shirasu, Y., see Sasaki, Y.F. (302) 165
Short, J.M., see Lundberg, K.S. (301) 99
Short, J.M., see Provost, G.S. (288) 133
Short, J.M., see Provost, G.S. (298) 145
Shourbaji, A., see Rutledge, J.C. (296) 167
Shuker, D.E.G., see Ashby, J. (286) 101
Shyama, S.K. and Rahiman, M.A.
Progestin (norethisterone)-induced genetic damage in mouse bone marrow (300) 215
Siddiqi, M., see Erdinger, L. (292) 41
Sies, H.
Damage to plasmid DNA by singlet oxygen and its protection (299) 183
Sigut, D., see Waghray, M. (284) 223
Silva, A.R., see Ribeiro, L.R. (300) 253
Simi, S., see Vatteroni, L. (291) 163
Simonet, J.-M., see Volff, J.-N. (287) 141
Simoni, G., see Salvi, R. (291) 213
Singh, S.P., see Abraham, S.K. (301) 255
Sinha, S.P., see Hoda, Q. (299) 29
Sinha, S.P., see Khan, P.K. (298) 157
Sinsheimer, J.E., Chen, R., Das, S.K., Hooberman, B.H., Osorio, S. and You, Z.
The genotoxicity of enantiomeric aliphatic epoxides (298) 197
Sinsheimer, J.E., see Das, L. (299) 19
Sinsheimer, J.E., see Hooberman, B.H. (299) 85
Sirover, M.A., see Weng, Y. (293) 133
Sivak, A., see Murphy, J.C. (296) 221
Šiviková, K. and Dianovský, J.
Induction of chromosomal aberrations, sister-chromatid exchanges and cell-cycle delay in cow peripheral blood lymphocytes treatment with two *N*-nitroso compounds in vitro (290) 311
Skandalis, A., see Curry, J. (288) 269
Skandalis, A., see Grosovsky, A.J. (289) 297
Skopek, T.R., see Cariello, N.F. (288) 103
Skopek, T.R., see Walker, V.E. (288) 151
Skov, B., see Rank, J. (300) 29
Slavotinek, A., Thomson, A., Eynaud, P., Perry, P., Steel, C.M. and Eden, O.B.
The frequency of micronuclei in bone-marrow erythroblasts during the treatment of childhood acute lymphoblastic leukaemia (303) 11
Śledziewska-Gójska, E.
The level of GC → AT transitions induced by MMS is not affected by the adaptive response in *Escherichia coli* K12 (294) 1
Slone, T.H., see Gold, L.S. (286) 75
Smirnova, G.V., see Oktyabrsky, O.N. (293) 197
Smith, L.E. and Grosovsky, A.J.
Evidence for high-frequency allele loss at the *aprt* locus in TK6 human lymphoblasts (289) 245
Smith, M., see Henderson, L. (291) 79
Smooker, P.M. and Cotton, R.G.H.
The use of chemical reagents in the detection of DNA mutations (288) 65
Soares, R.A., see Leitão, A.C. (286) 173
Søderlund, E.J., see Becher, R. (285) 305
Sofuni, T., see Hagiwara, Y. (291) 171
Sofuni, T., see Honma, M. (286) 165

Sofuni, T., see Matsuoka, A. (298) 255
Sofuni, T., see Suzuki, T. (285) 221
Sofuni, T., see Watanabe, M. (301) 7
Somia, N.V., Jessop, J.K. and Melton, D.W.
Phenotypic correction of a human cell line (46BR) with aberrant DNA ligase I activity (294) 51
Sommer, S.S., see Bottema, C.D.K. (288) 93
Sonneveld, E., see Van Loon, A.A.W.M. (294) 139
Sorić, J., see Osmak, M. (303) 113
Sors, A., see Parry, J.M. (287) 3
Sorsa, M., see Lähdetie, J. (300) 37
Speit, G., see Köberle, B. (301) 65
Spiegelhalder, B., see Erdinger, L. (292) 41
Spuntarelli, F., see Cozzi, R. (299) 37
Srivastava, V.K., Miller, S., Schroeder, M.D., Hart, R.W. and Busbee, D.
Age-related changes in expression and activity of DNA polymerase α: some effects of dietary restriction (295) 265
Stack, H.F., see Dearfield, K.L. (297) 197
Stack, H.F., see Jackson, M.A. (296) 241
Stambrook, P.J., see Chen, J. (287) 217
Stamp, D., see Bruce, W.R. (290) 111
Stapley, R., see Rogers, C.G. (299) 9
Staron, K., Kowalska-Loth, B., Szumiel, I. and Buraczewska, I.
Sensitivity to inhibitors of type II topoisomerases from mouse L5178Y lymphoma strains that are resistant or sensitive to X-radiation (285) 175
Stecca, C., see Duverger-van Bogaert, M. (292) 199
Steel, C.M., see Slavotinek, A. (303) 11
Steen, A.-M., Sahlén, S., Hou, S.-M. and Lambert, B.
Hprt activities and RNA phenotypes in 6-thioguanine resistant human T-lymphocytes (286) 209
Steindl, K., see Grammatico, P. (300) 119
Steinel, H.H., Bonin, A.M., He, S. and Baker, R.S.U.
Cytogenetic damage and tumor incidence in mouse skin after single, topical applications of 7,12-dimethylbenz[*a*]anthracene (285) 19
Steingrimsdottir, H., Rowley, G., Waugh, A., Beare, D., Ceccherini, I., Cole, J. and Lehmann, A.R.
Molecular analysis of mutations in the *hprt* gene in circulating lymphocytes from normal and DNA-repair-deficient donors (294) 29
Stephen Lloyd, R., see Higley, M. (294) 109
Stern, B.R., see Gold, L.S. (286) 75
Stewart, S.P., see Von Borstel, R.C. (289) 97
Stewart, U., see Moyer, R. (288) 291
Stocco, A., see Russo, A. (287) 275
Stopper, H., Körber, C., Schiffmann, D. and Caspary, W.J.
Cell-cycle dependent micronucleus formation and mitotic disturbances induced by 5-azacytidine in mammalian cells (300) 165
Storer, R.D., see Elia, M.C. (291) 193
Storti, P.V., see Fracasso, M.E. (298) 91
Stoye, J.P., see Rinchik, E.M. (286) 199
Straume, T., Raabe, O.G., Walsh, K.J. and Wiley, L.M.
Inherited effects from irradiated mouse immature oocytes detected in aggregation embryo chimeras (287) 243
Strauss, G.H.S., see Vijayalaxmi, (292) 123
Streffer, C.
Chromosomal damage in preimplantation mouse embryos and its development through the cell cycle (299) 313
Streffer, C., see Wuttke, K. (286) 181
Strike, P.
Recent advances in DNA repair and mutation: A report of the meeting of the British Photobiology Society and the DNA Repair Network, London, 16 December 1991 (293) 79
Strobel, R., see Chételat, A. (292) 241
Subhadra, A.V., Panda, K.K. and Panda, B.B.
Residual mercury in seed of barley (*Hordeum vulgare* L.) confers genotoxic adaptation to ethyl methanesulfonate, maleic hydrazide, methyl mercuric chloride and mercury-contaminated soil (300) 141
Subias, A., see Barquinero, J.F. (286) 275
Sudman, P.D., Rutledge, J.C., Bishop, J.B. and Generoso, W.M.
Bleomycin: female-specific dominant lethal effects in mice (296) 143
Sugimura, T., see Nagao, M. (290) 43
Sugimura, T., see Tohda, H. (289) 275
Sugiyama, C., see Sasaki, Y.F. (300) 5
Sugiyama, H., see Tanaka, T. (288) 277
Sugiyama, M., Tsuzuki, K. and Haramaki, N.
DNA single-strand breaks and cytotoxicity induced by sodium chromate(VI) in hydrogen peroxide-resistant cell lines (299) 95
Sullivan, L.M., see Branda, R.F. (285) 269
Suto, M.J., see Ciaravino, V. (298) 227
Suzuki, M., Takahashi, K., Morita, T., Kojima, M. and Tada, M.
The action of 4-hydroxyaminobiphenyl in *Escherichia coli*: cytotoxic and mutagenic effects in DNA repair deficient strains (301) 125
Suzuki, T., Hayashi, M., Sofuni, T. and Myhr, B.C.
The concomitant detection of gene mutation and micronucleus induction by mitomycin C in vivo using *lacZ* transgenic mice (285) 221
Swift, M., see Heim, R.A. (284) 25
Symonds, N.D.
Francis Ryan and the origins of directed mutagenesis (285) 9
Szumiel, I., see Staron, K. (285) 175

Tachon, P., see Muiras, M.L. (295) 47
Tada, M., see Suzuki, M. (301) 125
Takagi, K., see Watanabe, T. (302) 177
Takahashi, K., see Suzuki, M. (301) 125
Takebe, H., see Tatsumi-Miyajima, J. (294) 317
Takizawa, H., see Sato, S.-i. (301) 45
Talukder, G., see Sarkar, D. (301) 33
Tan, B.H., see Gaubatz, J.W. (295) 81
Tanaka, T., Yamagami, T., Oka, Y., Nomura, T. and Sugiyama, H.
The scid mutation in mice causes defects in the repair system for both double-strand DNA breaks and DNA cross-links (288) 277
Taningher, M., Pellerano, P., Terranova, M.P., Malacarne, D. and Bonatti, S.

A genotoxicity study on *N*-acryloyl-*N'*-phenylpiperazine: implications of aneugenic effects in risk evaluations (301) 275
Tanzarella, C., see Antoccia, A. (287) 93
Tanzarella, C., see Caporossi, D. (290) 265
Tarone, R.E., see Parshad, R. (294) 149
Tatsumi, K., see Inoue, M. (294) 179
Tatsumi-Miyajima, J., Yagi, T. and Takebe, H.
Analysis of mutations caused by DNA double-strand breaks produced by a restriction enzyme in shuttle vector plasmids propagated in ataxia telangiectasia cells (294) 317
Tawa, R., see Miyamura, Y. (295) 63
Tchou, J. and Grollman, A.P.
Repair of DNA containing the oxidatively-damaged base, 8-oxoguanine (299) 277
Tease, C.
Radiation- and chemically-induced chromosome aberrations in mouse oocytes: A comparison with effects in males (296) 135
Tegelenbosch, R.A.J. and De Rooij, D.G.
A quantitative study of spermatogonial multiplication and stem cell renewal in the C3H/101 F_1 hybrid mouse (290) 193
Tejada de Hernández, I., see Márquez-Márquez, R. (299) 1
Telikepalli, H., see Obaseiki-Ebor, E.E. (302) 109
Ten Hoor, F., see De Kok, T.M.C.M. (302) 103
Tennant, R.W.
Stratification of rodent carcinogenicity bioassay results to reflect relative human hazard (286) 111
Terranova, M.P., see Taningher, M. (301) 275
Tezza, F., see Fracasso, M.E. (298) 91
Thacker, J., see Ganesh, A. (299) 251
Theiss, J., see Kirshna, G. (302) 119
Theiss, J.C., see Ciaravino, V. (298) 227
Thomas, I.M., see D'Souza, D. (284) 251
Thomas, S.M.
Extreme cold sensitivity of *Salmonella typhimurium umu* clones, effects of the *umu* region and flanking sequences (285) 95
Thomson, A., see Slavotinek, A. (303) 11
Tice, R.R., see Tucker, J.D. (297) 101
Tice, R.R., see Vijayalaxmi, (292) 123
Tinwell, H., see Ashby, J. (286) 101
Tinwell, H., see Ashby, J. (292) 25
Tischfield, J.A., see Chen, J. (287) 217
Tohda, H., Nagao, M., Sugimura, T. and Oikawa, A.
Okadaic acid, a protein phosphatase inhibitor, induces sister-chromatid exchanges depending on the presence of bromodeoxyuridine (289) 275
Tokiwa, H., Horikawa, K. and Ohnishi, Y.
Genetic toxicology and carcinogenicity of mono- and dinitrofluoranthenes (297) 181
Tokiwa, H., see Matsuoka, A. (298) 255
Tometsko, A.M., Dertinger, S.D. and Torous, D.K.
Analysis of micronucleated cells by flow cytometry. 2. Evaluating the accuracy of high-speed scoring (292) 137
Tometsko, A.M., Torous, D.K. and Dertinger, S.D.
Analysis of micronucleated cells by flow cytometry. 1. Achieving high resolution with a malaria model (292) 129
Tometsko, A.M., Torous, D.K. and Dertinger, S.D.
Analysis of micronucleated cells by flow cytometry. 3. Advanced technology for detecting clastogenic activity (292) 145
Törnqvist, M., see Farooqi, Z. (288) 223
Törnqvist, M., see Granath, F. (284) 297
Torous, D.K., see Tometsko, A.M. (292) 129
Torous, D.K., see Tometsko, A.M. (292) 137
Torous, D.K., see Tometsko, A.M. (292) 145
Triggs, C.N., see Ferguson, L.R. (287) 101
Trujillo, J.M., see Liu, P.K. (288) 229
Trujillo-Valdés, V.M., see Madrigal-Bujaidar, E. (300) 135
Tselepi, M.R., Zacharopoulou, A., Demopoulos, N.A. and Catsoulacos, P.
Induction of chromosomal aberrations in human lymphocytes by the antitumour alkylating agent homo-aza-steroidal ester of *p*-bis(2-chloroethyl)aminophenoxy acetic acid, in vitro (290) 211
Tsutsui, M., see Mano, H. (290) 303
Tsutsui, T., see Hayashi, N. (290) 293
Tsuzuki, K., see Sugiyama, M. (299) 95
Tucker, J.D., Auletta, A., Cimino, M.C., Dearfield, K.L., Jacobson-Kram, D., Tice, R.R. and Carrano, A.V.
Sister-chromatid exchange: second report of the Gene-Tox program (297) 101
Tucker, J.D., Vanderlaan, M., Kwan, T.C., Moore II, D.H. and Felton, J.S.
Effects of diet and folate on levels of micronucleated polychromatic erythrocytes (301) 19
Tudón, H., see Palma, V. (286) 267
Tuomisto, J., see Jansson, K. (299) 25
Tuppurainen, K. and Lötjönen, S.
On the mutagenicity of MX compounds (287) 235
Turner, G.N., see Amacher, D.E. (300) 79
Turner, P.M., see Ferguson, L.R. (289) 157
Turturro, A., Duffy, P.H. and Hart, R.W.
Modulation of toxicity by diet and dietary macronutrient restriction (295) 151
Turturro, A., see Hart, R.W. (295) 149
Turturro, A., see Randerath, K. (295) 247

Ubbink, M., see Visse, R. (294) 263
Udaka, S., see Yamada, T. (286) 293
Uehara, Y., see Miyamura, Y. (295) 63
Ueno, H., see Sayato, Y. (300) 207
Uno, Y. and Morita, M.
Mutagenic activity of some platinum and palladium complexes (298) 269
Urda, G., see Kirshna, G. (302) 119
Urios, A., see Herrera, G. (301) 1

Vacek, P.M., see Branda, R.F. (285) 269
Vainio, H., see Lähdetie, J. (300) 37
Vaittinen, S.-L., see Jansson, K. (299) 25
Van Bao, T., Imreh, E. and Czeizel, A.E.
Cytogenetic effects of diazepam in peripheral lymphocytes of self-poisoned persons (298) 131
Van den Akker, E., see Braun, J.E.F. (289) 255
Van den Akker, E., see Retèl, J. (299) 165

Van de Putte, P., see Visse, R. (294) 263
Vanderlaan, M., see Tucker, J.D. (301) 19
Van der Meer, Y., Cattanach, B.M. and De Rooij, D.G.
The radiosensitivity of spermatogonial stem cells in C3H/101 F_1 hybrid mice (290) 201
Van der Schans, G.P., see Mol, M.A.E. (294) 235
Van der Schans, G.P., see Van Loon, A.A.W.M. (294) 139
Vandewiele, D., see Volff, J.-N. (287) 141
Van Hummelen, P., Gennart, J.P., Buchet, J.P., Lauwerys, R. and Kirsch-Volders, M.
Biological markers in PAH exposed workers and controls (300) 231
Van Iersel, M.L.P.S., see De Kok, T.M.C.M. (302) 103
Van Loon, A.A.W.M., Sonneveld, E., Hoogerbrugge, J., Van der Schans, G.P., Grootegoed, J.A., Lohman, P.H.M. and Baan, R.A.
Induction and repair of DNA single-strand breaks and DNA base damage at different cellular stages of spermatogenesis of the hamster upon in vitro exposure to ionizing radiation (294) 139
Van Rensburg, C.E.J., see Van Staden, A.M. (288) 257
Van Schaik, N. and Graf, U.
Structure–activity relationships of tricyclic antidepressants and related compounds in the wing somatic mutation and recombination test of *Drosophila melanogaster* (286) 155
Van Staden, A.M., Van Rensburg, C.E.J. and Anderson, R.
Vitamin E protects mononuclear leucocyte DNA against damage mediated by phagocyte-derived oxidants (288) 257
Van Zeeland, A.A., see Mullenders, L.H.F. (299) 271
Vartiainen, T., see Jansson, K. (299) 25
Vatteroni, L., Piras, A., Simi, S., Mariani, L., Moretti, A., Citti, L., Mariani, T. and Rainaldi, G.
Analysis of electroporation-induced genetic damages in V79/AP4 Chinese hamster cells (291) 163
Vaughan, P., Lindahl, T. and Sedgwick, B.
Induction of the adaptive response of *Escherichia coli* to alkylation damage by the environmental mutagen, methyl chloride (293) 249
Vázquez, A.M., see Linacero, R. (302) 201
Veigl, M.L., see Anderson, R.D. (288) 181
Veigl, M.L., see Anderson, R.D. (294) 215
Velemínský, J., see Gichner, T. (300) 57
Velemínský, J., see Grúz, P. (303) 1
Verellen-Dumoulin, C., see Gennart, J.P. (299) 55
Verhaegh, G.W.C.T., see Jongmans, W. (294) 207
Verschaeve, L., Domracheva, E.V., Kuznetsov, S.A. and Nechai, V.V.
Chromosome aberrations in inhabitants of Byelorussia: consequence of the Chernobyl accident (287) 253
Vettori, M.V., see Poli, P. (298) 113
Vian, L., Bichet, N. and Gouy, D.
The in vitro micronucleus test on isolated human lymphocytes (291) 93
Viegas-Péquignot, E., see Richard, F. (295) 71
Vigny, P., see Averbeck, D. (287) 165
Vijayalaxmi, Strauss, G.H.S. and Tice, R.R.
An analysis of γ-ray-induced DNA damage in human blood leukocytes, lymphocytes and granulocytes (292) 123
Vikse, R., Knapstad, A., Klungsøyr, L. and Grivas, S.
Mutagenic activity of the methyl and phenyl derivatives of the food mutagen 2-amino-3-methylimidazo[4,5-*f*]-quinoxaline (IQx) in the Ames test (298) 207
Vilchis, C., see Espinosa-Aguirre, J.J. (300) 151
Villani, G., see Bouayadi, K. (294) 77
Villaseñor, I.M. and Edu, D.A.
Antimutagen from leaves of *Carmona retusa* (Vahl) Masam. (298) 215
Vilpo, J.A. and Vilpo, L.M.
Nucleoside monophosphate kinase may be the key enzyme preventing salvage of DNA 5-methylcytosine (286) 217
Vilpo, L.M., see Vilpo, J.A. (286) 217
Vinitketkumnuen, U., see Higashimoto, M. (303) 135
Visse, R., De Ruijter, M., Ubbink, M., Brandsma, J.A. and Van de Putte, P.
The first zinc-binding domain of UvrA is not essential for UvrABC-mediated DNA excision repair (294) 263
Vlček, D., see Podstavková, S. (293) 65
Vlček, D., see Vlčková, V. (302) 153
Vlčková, V., Miadoková, E., Podstavková, S. and Vlček, D.
Mutagenic activity of phosmet, the active component of the organophosphorus insecticide Decemtione EK 20 in Salmonella and Saccharomyces assays (302) 153
Vogel, E.W.
Tests for recombinagens in somatic cells of Drosophila (284) 159
Vogel, E.W., see Ashby, J. (286) 101
Vogel, E.W., see Ballering, L.A.P. (285) 211
Volff, J.-N., Vandewiele, D., Simonet, J.-M. and Decaris, B.
Ultraviolet light, mitomycin C and nitrous acid induce genetic instability in *Streptomyces ambofaciens* ATCC23877 (287) 141
Volobouev, V., see Richard, F. (295) 71
Von Borstel, R.C., Ord, R.W., Stewart, S.P., Ritzel, R.G., Lee, G.S.-F., Hennig, U.G.G. and Savage, E.A.
The mutator *mut7-1* of *Saccharomyces cerevisiae* (289) 97
Von Petersdorff, I., see Edenharder, R. (287) 261
Vořechovský, I., Scott, D., Haeney, M.R. and Webster, D.A.B.
Chromosomal radiosensitivity in common variable immune deficiency (290) 255
Vorobtsova, I.E., Aliyakparova, L.M. and Anisimov, V.N.
Promotion of skin tumors by 12-*O*-tetradecanoylphorbol-13-acetate in two generations of descendants of male mice exposed to X-ray irradiation (287) 207
Voutsinas, G., Kappas, A., Demopoulos, N.A. and Catsoulacos, P.
Comparative study on the mutagenicity of three structurally related substituted aniline mustards in the Salmonella/microsome assay (298) 261
Vrieling, H., see Mullenders, L.H.F. (299) 271

Waghray, M., Sigut, D., Einspenner, M., Kunhi, M., Al-Sedairy, S.T. and Hannan, M.A.
Chronic γ-irradiation results in increased cell killing and chromosomal aberration with specific breakpoints in fibroblast cell strains derived from non-Hodgkin's lymphoma patients (284) 223
Wagner, E.D., see Gichner, T. (300) 57
Wagner, E.D., see Seo, K.-Y. (299) 111

Wahrenburg, M.G., see Amacher, D.E. (300) 79
Walker, V.E. and Skopek, T.R.
A mouse model for the study of in vivo mutational spectra: Sequence specificity of ethylene oxide at the *hprt* locus (288) 151
Wallace, S., see Evans, J. (299) 147
Wallace, S.S., see Bockrath, R. (288) 207
Wallin, M. and Hartley-Asp, B.
Effects of potential aneuploidy inducing agents on microtubule assembly in vitro (287) 17
Walsh, K.J., see Straume, T. (287) 243
Walter, B.N., see Grosovsky, A.J. (289) 231
Walter, B.N., see Grosovsky, A.J. (289) 297
Wanamarta, A.H., see Braun, J.E.F. (289) 255
Wanamarta, A.H., see Retèl, J. (299) 165
Wang, B., see Cai, L. (303) 157
Wang, H.W., see Qu, Y.H. (298) 105
Wang, T.-C.V., Chang, H.-Y. and Hung, J.-L.
Cosuppression of *recF*, *recR* and *recO* mutations by mutant *recA* alleles in *Escherichia coli* cells (294) 157
Wang, X., see Cai, L. (303) 157
Wang, Y.Y., see De Peyster, A. (297) 293
Ward, A.J., Olive, P.L., Burr, A.H. and Rosin, M.P.
A sensitivity to oxidative stress is linked to chromosome 11 but is not due to a difference in single strand DNA breakage or repair (294) 299
Warr, T.J., Parry, E.M. and Parry, J.M.
A comparison of two in vitro mammalian cell cytogenetic assays for the detection of mitotic aneuploidy using 10 known or suspected aneugens (287) 29
Warren, J., see Murphy, J.C. (296) 221
Warters, R.L., Lyons, B.W., Chen, D.J. and Sato, K.
DNA-damage processing in a radiation-sensitive mouse cell line (293) 91
Wassarman, P.M. and Kinloch, R.A.
Gene expression during oogenesis in mice (296) 3
Watanabe, K. and Ohta, T.
Mutation enhancing effect of *o*-vanillin in the *lacZ* gene of *Escherichia coli*: characterization of mutational spectrum (302) 13
Watanabe, K., see Matsumura, H. (298) 163
Watanabe, M., Sofuni, T. and Nohmi, T.
Comparison of the sensitivity of *Salmonella typhimurium* strains YG1024 and YG1012 for detecting the mutagenicity of aromatic amines and nitroarenes (301) 7
Watanabe, M., see Hagiwara, Y. (291) 171
Watanabe, T., Kaji, H., Takagi, K., Kinae, N. and Hirayama, T.
Micronucleus induction in mouse peripheral blood reticulocytes by 2,7-diaminophenazine and related compounds (302) 177
Waters, M.D., see Dearfield, K.L. (297) 197
Waters, M.D., see Jackson, M.A. (296) 241
Watson, W.P., see Chang, J. (291) 147
Waugh, A., see Steingrimsdottir, H. (294) 29
Weber, C., see Dabholkar, M. (293) 151
Webster, D.A.B., see Vořechovský, I. (290) 255
Wehner, E. and Brendel, M.
Formaldehyde lacks genotoxicity in formaldehyde-hyperresistant strains of the yeast *Saccharomyces cerevisiae* (289) 91
Weindruch, R., see Feuers, R.J. (295) 191
Weisburger, J.H., see Chen, W. (287) 227
Weng, Y. and Sirover, M.A.
Developmental regulation of the base excision repair enzyme uracil DNA glycosylase in the rat (293) 133
Werthmann, I., see Obe, G. (299) 305
Westendorf, J., see Forster, R. (298) 71
Westerman, M., see Moore, R.C. (285) 13
Weston, A.
Physical methods for the detection of carcinogen–DNA adducts in humans (288) 19
Wheeler, K.A., see Balbinder, E. (286) 253
Whitaker, S., see Powell, S. (294) 9
Whiting, R.J., see Dearfield, K.L. (297) 197
Wiley, L.M., see Straume, T. (287) 243
Wills, C., see Durand, J. (290) 239
Wilson, G.N.
Mutational risks in females: genomic imprinting and maternal molecules (296) 157
Windebank, S., see Henderson, L. (291) 79
Winder, C. and Bonin, T.
The genotoxicity of lead (285) 117
Winegar, R.A., see Lutze, L.H. (299) 225
Wintermann, F., see Mersch-Sundermann, V. (291) 53
Wintersberger, U., see Schiestl, R.H. (284) 111
Wolff, G., see Raabe, F. (300) 99
Wolff, S., Feeney, L. and Afzal, V.
Depletion of cellular polyamines by α-difluoromethylornithine increases 1,3-bis(2-chloroethyl)-1-nitrosourea-induced sister-chromatid exchanges (289) 107
Wolfson, K., see Amundson, S.A. (286) 233
Worm, K.-H., see Schulte-Frohlinde, D. (299) 233
Würgler, F.E.
Recombination and gene conversion (284) 3
Würgler, F.E., see Oppliger, T. (291) 181
Wuttke, K., Streffer, C. and Müller, W.-U.
Radiation induced micronuclei in subpopulations of human lymphocytes (286) 181

Xia, F., see Amundson, S.A. (286) 233
Xu, G.X., see Qu, Y.H. (298) 105
Xu, J., see Patierno, S.R. (300) 179
Xu, Z., Yu, Y., Gibbs, R.A., Caskey, C.T. and Hsie, A.W.
Multiplex DNA amplification and solid-phase direct sequencing for mutation analysis at the *hprt* locus in Chinese hamster cells (288) 237

Yagi, T., see Tatsumi-Miyajima, J. (294) 317
Yamada, H. and Sasaki, Y.F.
Organotins are co-clastogens in a whole mammalian system (301) 195
Yamada, H., Miyahara, T. and Sasaki, Y.F.
Inorganic cadmium increases the frequency of chemically induced chromosome aberrations in cultured mammalian cells (302) 137
Yamada, H., Miyahara, T., Kozuka, H., Matsuhashi, T. and Sasaki, Y.F.

Potentiating effects of organomercuries on clastogen-induced chromosome aberrations in cultured Chinese hamster cells (290) 281
Yamada, H., see Sasaki, Y.F. (286) 221
Yamada, H., see Sasaki, Y.F. (300) 5
Yamada, T., Osawa, T., Kawakishi, S., Udaka, S. and Ohta, T.
Antimutagenic effects of *N*-methyl-valyl-amiclenomycin (BA-2) isolated from the metabolites of Streptomyces sp. (286) 293
Yamagami, T., see Tanaka, T. (288) 277
Yamaguchi, T.
Inhibitory activity of heat treated vegetables and indigestible polysaccharides on mutagenicity (284) 205
Yamamoto, M., see Mano, H. (290) 303
Yamamoto, M., see Matsushita Jr., H. (301) 213
Yamao, F., Nagai, Y., Kaneda, S., Yoshida, S. and Seno, T.
Conditional resistance to thymineless death predominantly selects DNA synthesis-deficient mutants of mammalian cells (289) 83
Yamashita, M., see Inoue, M. (294) 179
Yamatsu, K., see Hakura, A. (303) 127
Yamazaki, H., see Shimada, T. (284) 233
Yamazaki, N., see Matsuoka, A. (298) 255
Yamazoe, Y., see Ando, M. (292) 155
Yang, J., see Ren, L. (301) 223
Yang, R.S.H., see Kligerman, A.D. (300) 125
Yao, H., see Cai, L. (303) 157
Yates, B.L. and Morgan, W.F.
Nonhomologous DNA end rejoining in chromosomal aberration formation (285) 53
Yeung, A.T., see Boiteux, S. (294) 43
Yin, Y., see Bruce, W.R. (290) 111
Yoshida, K., see Mano, H. (290) 303
Yoshida, S., see Yamao, F. (289) 83
Yoshida, T., see Lee, H. (297) 53
You, Z., see Sinsheimer, J.E. (298) 197
Young, R.R., see Ivett, J.L. (298) 43
Youngman, L.D.
Protein restriction (PR) and caloric restriction (CR) compared: effects on DNA damage, carcinogenesis, and oxidative damage (295) 165
Yu, K.S., see Heo, M.Y. (284) 243
Yu, Y., see Xu, Z. (288) 237

Zacharopoulou, A., see Tselepi, M.R. (290) 211
Žák, P., see Grúz, P. (303) 1
Zandee, J., see Kirshna, G. (302) 119
Zanesi, N., see Celotti, L. (294) 117
Zannotti, M., see Chiricolo, M. (295) 105
Zdzienicka, M.Z., see Jongmans, W. (294) 207
Zdzienicka, M.Z., see Mullenders, L.H.F. (299) 271
Zdzienicka, M.Z., see Natarajan, A.T. (299) 297
Zeiger, E.
Mutagenicity of chemicals added to foods (290) 53
Zeni, O., see Scarfì, M.R. (289) 291
Zhang, A., Lin, M.S. and Fujimoto, A.
Effects of 5-hydroxymethyl-2′-deoxyuridine and 3-aminobenzamide on chromosome aberrations in cultured human lymphocytes (301) 229
Zhang, H., see Ren, L. (301) 223
Zhang, L., see Meng, Z. (298) 63
Zhang, X.-M., see Bruce, W.R. (290) 111
Zhang, X.-X., Chakrabarti, S., Malick, A.M. and Richer, C.-L.
Effects of different styrene metabolites on cytotoxicity, sister-chromatid exchanges and cell-cycle kinetics in human whole blood lymphocytes in vitro (302) 213
Zhang, X.B. and Ohta, Y.
Anticlastogenic and bio-antimutagenic activity of cultured broth of *Saccharomyces cerevisiae* 28 on mutagens (300) 201
Zhang, X.B. and Ohta, Y.
Antimutagenicity of cell fractions of microorganisms on potent mutagenic pyrolysates (298) 247
Zhang, Z., see Ren, L. (301) 223
Zhou, G.-D., see Randerath, K. (295) 247
Zhou, G.-D., see Randerath, K. (295) 31
Zhou, J.Z., see Qu, Y.H. (298) 105
Zhu, L.F., see Qu, Y.H. (298) 105
Zhu, W., Kriajevskaia, M., Keng, P.C. and Chou, W.-G.
A "trans-acting" factor for activation of transcription is defective in the xrs-5 mutant of the Chinese hamster ovary cell line (294) 101
Zhu, Y., see Racine, J.-F. (294) 285
Ziegler-Skylakakis, K., see Herrera, L.A. (303) 121
Zielenska, M., see Jiao, J. (301) 27
Zielenska, M., see Pienkowska, M. (288) 123
Zijno, A., see Leopardi, P. (287) 119
Zimmering, S., see Olvera, O. (301) 201
Zimmermann, F.K.
Tests for recombinagens in fungi (284) 147
Zöhrer, E., see Knasmüller, S. (299) 45
Zoll-Moreux, C., see Fernandez, M. (292) 83
Zouh, R., see Adler, I.-D. (301) 249
Zunica, G., see Marini, M. (301) 243
Zwanenburg, T.S.B., see Natarajan, A.T. (287) 47
Zwingelberg, R., Obe, G., Rosenthal, M., Mevissen, M., Buntenkötter, S. and Löscher, W.
Exposure of rats to a 50-Hz, 30-mT magnetic field influences neither the frequencies of sister-chromatid exchanges nor proliferation characteristics of cultured peripheral lymphocytes (302) 39

Mutation Research, 284–303/INDEX (1993) 33–49
© 1993 Elsevier Science B.V. All rights reserved 0027-5107/93/$06.00

Master Keyword Index to Volumes 284–303

2-AAF, (295) 19
Aberrant crypt foci, (290) 111
Aberrations, (288) 281, (301) 57
Abstracts, (292) 259
Accessory protein, (295) 265
Accuracy, (292) 137
Acetaminophen, (300) 57
2-Acetylaminofluorene, (302) 61, (302) 91
Acetylation phenotype, (290) 35
Acetyl-CoA:arylamine-*N*-acetyltransferase (EC 2.3.1.5), (302) 45
Acetyltransferase, (291) 171, (301) 7
O-Acetyltransferase, (301) 157
Acridine orange, (299) 135
Acridine orange supravital staining, (302) 177
Acrolein, (301) 93
Acrylamide, (300) 91, (301) 249
Active oxygen, (299) 95
Ada, (293) 249, (303) 1
Ad-3A locus, (285) 145
Adaptive dose, (302) 191
Adaptive response, (293) 249, (294) 1, (301) 171, (302) 157, (302) 161, (302) 191, (303) 1, (303) 157
Ad-3B locus, (285) 145
Adduct levels, (284) 297
Adenine phosphoribosyltransferase locus, (284) 287
Adenine phosphoribosyltransferase gene, (287) 217
Adenoma, (290) 3, (290) 13
Adenovirus, (293) 215
Adriamycin, (284) 243, (301) 107
AFB_1, (295) 19
AFB1-DNA adduct, (295) 223
Aflatoxin B1, (295) 223, (296) 181, (299) 1
Age dependence, (295) 11
Age dependence, fish, (293) 225
Ageing, (291) 141, (295) 55, (295) 63, (295) 71, (295) 81, (295) 93, (295) 113, (295) 191, (295) 265, (301) 261
Aggregation embryo chimera, (287) 243
Airborne particulate genotoxicity, (298) 113
Air particulate, (292) 51
Air pollution, (289) 145
Aldehydes, (290) 53, (293) 1
Aliphatic epoxides, (299) 19, (299) 85
*Alk*A, (303) 1
Alkali-labile sites, (294) 21
Alkaline elution, (291) 193, (294) 235, (295) 105, (299) 135, (300) 223
Alkaline step elution, (287) 165
Alkylating agents, (293) 187, (298) 97, (298) 163
Alkylation, (303) 143
Alkylation damage, (293) 249
Alkylation mutagenesis, (294) 127
Alkylation of macromolecules, (284) 297
O^6-Alkylguanine, (299) 123
Alkylhydrazines, (301) 213
Alkylleads, (298) 1
Allele loss, (289) 245
Allele-specific, (288) 93
Allium, (300) 29
Alphamethrin, (298) 25
*Alu*I, (299) 305
Aluminium plasma etching, (300) 99
Alzheimers's disease, (285) 69
Ambystoma mexicanum, (292) 83
Ames assay, (300) 207
Ames Salmonella/microsome assay, (290) 303
Ames Salmonella test system, (292) 199
Ames test, (290) 53, (291) 61, (292) 51, (292) 241, (297) 53, (298) 71, (298) 269, (301) 113, (302) 45
Ames tester strains, (298) 237
Ames testing, (298) 53
9-Aminoacridine, (285) 101
2-Aminoanthracene, (297) 53, (301) 113
3-Aminobenzamide, (284) 251, (293) 39, (301) 229
4-Aminobiphenyl, (301) 125
Aminocarbazoles, (299) 63
2-Amino-3-methylimidazo[4,5-*f*]quinoline (IQ), (302) 45
2-Amino-1-methyl-6-phenyl-imidazo[4,5-*b*]pyridine, (290) 43
1-Aminophenazine, (302) 177
2-Aminophenazine, (302) 177
Ammonia inactivation, (299) 1
Ammonium metavanadate, (301) 165
Amniocentesis, (300) 37
Amniotic cell fluid, (300) 195
Amniotic fluid, (300) 37
Amphibian, (298) 31
Amplification, (288) 93
Aneugenic effect, (303) 163
Aneugenicity, (298) 149
Aneugens, (287) 29

Aneugens, chemical, (287) 3
Aneugen, specific, (303) 101
Aneuploidy, (284) 265, (287) 23, (287) 29, (287) 71, (287) 93, (289) 223, (295) 71, (296) 69, (296) 241, (300) 155, (301) 275
Aneuploidy induction, (287) 3, (287) 17, (287) 47, (287) 57, (287) 101, (287) 113, (287) 119
Aniline mustards, (298) 261
Animal bioassays, (296) 181
Animal cancer test, (286) 75
Annual Meeting 1992, (292) 259
Antagonism, (301) 33
Anthracene derivatives, (298) 31
Antibody, (292) 113
Anticarcinogens, (290) 139
Anticlastogenic effect, (284) 243
Anticlastogenicity, (300) 201
Antikinetochore staining, (287) 93
Antimutagen, (284) 205
Antimutagenesis, (303) 151
Antimutagenic activity, (290) 79, (301) 93
Antimutagenic effect, (286) 221, (286) 293
Antimutagenicity, (287) 261, (297) 53, (298) 215, (300) 151, (302) 109, (303) 55
Antimutagenicity of chlorophyllin, (287) 293
Antimutagenic mechanism, (300) 201
Anti-mutation, (284) 185
Antimutators, (285) 91
Antineoplastic drugs, (302) 19
Antioxidant defense, (284) 275
Antioxidants, (295) 191
Antischistosomal agent, (298) 179
Antitumour drug, (290) 211, (298) 277
Aphidicolin, (285) 13, (295) 125
Aprt gene, (289) 245
APRT locus, (284) 287
Apurinic DNA damage, (288) 207
Aquatic vertebrates, (298) 25
Arabidopsis thaliana, (300) 57
1-β-D-Arabinofuranosylcytosine, (294) 149
Aroclor, (301) 261
Aromatic amines, (290) 175, (291) 171, (301) 7
Aromatic tertiary amines, (301) 275
Arsenite, (294) 21
Arylamine activation, (292) 155
Arylamines, (301) 157
Ascorbic acid, (300) 1, (302) 183
Ashes, mutagenicity of, (301) 39
Aspergillus nidulans, (284) 147
Aspirin, (296) 199
Assessment of genotoxicity data, (291) 87
Ataxia telangiectasia, (284) 25, (285) 69, (290) 265, (293) 31, (294) 9, (294) 29, (294) 207, (294) 317
A:T → C:G transversions, (284) 307
Atomic absorbance spectroscopy, (288) 19
Atomic bomb survivor, (291) 125
Atresia, (296) 89
Attachment, (291) 21
Automated scoring, (292) 129, (292) 137, (292) 145
Autosomal mutations, (285) 45
5-Azacytidine, (300) 49, (300) 165
Azathioprine, (302) 7
Azathioprine, administration, (291) 79
Azelaic acid, (300) 119
Azidoalanine, (302) 147
9-(3-Azido-2-hydroxypropyl)-adenine, (303) 1
3-Azido-1,2-propanediol, (303) 1
Azithromycin, (300) 79

Bacillus polymyxa, (301) 73
Bacillus subtilis, (302) 147
Bacteriophage, (303) 143
Bacteriophage ΦX174, (299) 123
Bacteriophage T4, (286) 189
Bacteriophage T7 gene 1.2, (288) 301
Base analogue, (301) 45
Base damage, (294) 139
Base lesion repair, (290) 281
Base-pair substitution mutations, (302) 109
Bay region, (287) 181
BCNU, (289) 107
Beers, commercial, (298) 43
Benomyl, (300) 15
Benz[*a*]anthracene derivatives, (298) 31
Benzene, (298) 81, (302) 61
Benzidine, (285) 27
Benzimidazoles, (300) 15
Benz[*j*]aceanthrylene, (287) 181
Benzo[*a*]pyrene, (284) 233, (284) 243, (287) 165, (295) 223, (297) 53, (301) 113
Benzo[*a*]pyrene diolepoxide, (294) 117
anti-Benzo[*a*]pyrene-diol-epoxide–DNA antibody analysis, (292) 113
Benzo[*c*]phenanthridine alkaloids, (298) 277
7,8-Benzoflavone, (300) 57
N-Benzylimidazole, (302) 129
Berberine, (286) 243
Berenil, (300) 165
Bile acids, (284) 185, (290) 71, (302) 103
Biliary tract cancer, (290) 303
Binding, (298) 247
Binucleated cells, (291) 35, (300) 281
Bio-antimutagenicity and cell fractions, (298) 247
Bioassay, (284) 159
Biological dosimetry, (288) 163
Biological monitoring, (285) 241, (302) 19
Biomarkers, (295) 247
Biomaterials, (301) 275
Biomonitoring, (300) 231
Birth defects, (296) 167
1,3-Bis(2-chloroethyl)-1-nitrosourea, (289) 107
Blastocyst formation, (296) 17
Bleomycin, (284) 195, (289) 215, (290) 231, (296) 143, (301) 243
Bloom syndrome, (284) 25, (294) 51
Blue cotton, (290) 79
Blue rayon, (290) 79, (290) 303
Bone marrow, (292) 63, (292) 231, (300) 215
Bone-marrow cells, (300) 273
Bone marrow, in vivo, (301) 87

Bone marrow, non-malignant, (293) 151
Bone marrow, rat, (291) 79
Bovine lymphocytes, (289) 291
BP-DNA adduct, (295) 223
46BR, (294) 51
Brain, (295) 11
BrdUrd dependence, (289) 275
Bromodeoxyuridine, (289) 139, (292) 205
5-Bromo-2′-deoxyuridine, (295) 113
Bromodeoxyuridine/DNA analysis, (290) 217
Buccal micronuclei, (299) 103
Buprofezin, genotoxicity, (303) 121
Butadiene, (300) 77
Buthionine sulphoximine, (300) 141, (301) 255
tert.-Butyl-*p*-quinone, (299) 9

CAD gene amplification, (301) 177
Cadmium, (299) 95, (301) 113, (302) 137
Cadmium nitrate, (302) 157
Caecal cell-free extract, (298) 9
Caffeine, (284) 195, (295) 55
Caffeine-derived *N*-nitroso compounds, (292) 41
Caffeine effects, (293) 65
Caffeine inhibition, (302) 53
Calcium, (290) 87, (302) 103
Calcium silicate, (300) 45
Caloric (energy) restriction, (290) 63
Caloric restriction, (295) 19, (295) 31, (295) 165, (295) 181, (295) 191, (295) 201, (295) 223, (295) 247, (295) 281, (301) 261
Camptothecin, (285) 283
Cancer, (302) 39
Cancer patients, (293) 151
Cancer prevention, (290) 139, (290) 139
Cancer-risk assessment, (296) 181
Cancer susceptibility, (284) 15
9H-Carbazole, monosubstituted derivatives, (299) 63
Carbodiimide, (288) 65
Carbolines, (302) 165
Carcinoembryonic antigen, (299) 55
Carcinogenesis, (293) 47, (295) 81, (295) 113, (301) 79
Carcinogenesis, experimental, (290) 63
Carcinogenesis, extent and sites of, (286) 3
Carcinogenicity, (297) 181
Carcinogenic potency, correlation, (292) 25
Carcinogens, (300) 91
Carcinogens, chemical, (290) 155
Carcinoma, (290) 3, (290) 13
Carmona retusa, (298) 215
β-Carotene, (303) 97, (303) 109, (303) 151
Carotenoids, (299) 183
CAT, (294) 309
Catalase, (285) 227, (288) 215, (295) 191, (300) 223
CEC Aneuploidy Project, (287) 131
Cell cycle, (289) 61, (294) 69, (299) 313
Cell cycle analysis, (286) 267, (290) 317
Cell cycle delay, (290) 231, (302) 213
Cell cycle dependence, (290) 293
Cell cycle kinetics, (290) 311
Cell extracts, (291) 181
Cell killing, (293) 161
Cell permeability, (301) 1
Cell proliferation, (290) 43, (292) 165
Cell survival, (302) 213
Cell transformation, (285) 231, (303) 121
Cellular inactivation, (303) 143
Cellular kinetics, (286) 267, (290) 317
Cellular proliferation, transformation, (295) 281
Cellular stress, (288) 215
Cellulose-column fractionation methodology, (302) 119
Chalcones, (287) 261
Challenging dose, (302) 83
Characterisation of methotrexate-resistance clones, (291) 43
Chemical aneugens, (287) 3
Chemical mutagenesis, (301) 73
Chemical point mutagens, (286) 233
Chemicals, (292) 83, (296) 135
Chemicals, inducing SCEs, (297) 101
Chemical structure, influence of, (286) 3
Chemiluminescence, (285) 193
Chemoprevention, (303) 97
Chernobyl, (287) 253
C3H/101 F_1 hybrid mice, (290) 193, (290) 201
Chicken, (292) 231
Childhood ALL, chemotherapy, (303) 11
Chili extracts, (303) 55
Chimney sweeps, (289) 187
Chinese hamster cells, (287) 29
Chinese hamster lung (CHL) cell, (298) 255
Chinese hamster ovary cells, (298) 1, (298) 219
Chinese hamster ovary cells, commercial beers, (298) 43
Chinese hamster primary embryonic cells, (287) 47
Chinese hamster V79 cells, (287) 87, (288) 229, (290) 165, (298) 227
Chinese women, (298) 105
Chlamydomonas reinhardtii, (293) 65
Chloramphenicol acetyltransferase, (294) 309
5-Chlorodeoxyuridine, (297) 39
Chlorogenic acid, (303) 109
Chlorophyll, (290) 79
Chlorophyllin, (290) 79, (301) 33
Chlorophyllin, protective effect, (301) 201
Chlorophyllin-Sepharose, (287) 293
5-Chlorouracil, (297) 39
Chlorpromazine, (286) 155, (292) 251
CHO cells, (285) 253, (289) 215, (290) 217, (299) 305, (300) 37, (300) 281
CHO cells, cultured, (291) 35
CHO, in vitro, (292) 3
CHO-KI, (285) 261
CHO mutant, (285) 283, (288) 281
Chorionic villi, (291) 213
Chorionic villus samples, (298) 285
Chromate, (299) 95
Chromatid aberrations, (302) 157, (302) 161
Chromatid breaks, (294) 149, (302) 191
Chromatid gaps, (294) 149
Chromatid-type aberration induction, (299) 305

Chromium, (299) 55
Chromium (VI), (302) 207
Chromium(VI) oxide, (301) 201
Chromosomal aberration, (290) 311, (292) 251, (293) 161, (296) 143, (296) 241, (301) 177
Chromosomal aberration, in vitro, (298) 255, (303) 101
Chromosomal aberrations, (284) 215, (285) 53, (285) 117, (286) 281, (288) 223, (288) 263, (289) 197, (290) 265, (291) 163, (291) 213, (295) 55, (298) 197, (299) 19, (299) 289, (300) 45, (300) 79, (300) 215, (301) 13, (301) 87
Chromosomal exchange, (285) 13
Chromosome 11, (293) 31, (294) 299, (295) 71
Chromosome 21, (296) 69
Chromosome aberration, (286) 321, (292) 231, (293) 31, (294) 179, (298) 81, (303) 157
Chromosome aberrations, (284) 195, (284) 265, (285) 69, (286) 221, (286) 275, (290) 211, (290) 231, (290) 255, (292) 3, (292) 129, (295) 135, (296) 135, (298) 131, (298) 285, (299) 25, (300) 5, (300) 125, (300) 253, (300) 259, (300) 273, (301) 171, (301) 229, (301) 267, (302) 19, (302) 137
Chromosome analysis, (287) 253
Chromosome break, (284) 223
Chromosome breakage, (293) 47
Chromosome damage, (284) 257, (292) 145, (294) 199, (298) 179, (298) 227, (299) 313
Chromosome damage induction, (303) 71
Chromosome domains, (296) 33
Chromosome instability, (285) 231, (293) 205, (301) 149
Chromosome mutation, (284) 265
Chromosomes, (296) 57
Chronic treatment, (302) 61
Chrysarobin, (284) 185
Chrysene, (298) 277
Cigarette smoking, (300) 37
Ciprofibrate, (286) 135
Cisplatin, (293) 161, (300) 281, (303) 19, (303) 113
Cisplatin induction, (291) 35
Cisplatin resistance, (294) 77
Citric acid, (300) 1
c-Ki-*ras*, (303) 113
Clastogenic effects, (301) 33
Clastogenicity, (290) 293, (298) 149, (298) 157, (299) 29, (300) 111, (301) 183
Clastogenicity inducers, (291) 135
Clastogens, (292) 3
Clastogen screening, (292) 145
Cleavable complex, (293) 259
Clomipramine, (286) 155
Clonal cell line, (291) 125
Clonal expansion, (291) 207
Clonal relationship, determination, (288) 173
Close-fitting sleeves, (289) 7
Cluster mutations, (290) 273
Cobalt, (299) 55
Cobaltous chloride, (286) 173
Cockayne syndrome, (289) 47
Co-clastogenesis, (301) 195, (302) 137
Co-60 γ-rays, (302) 191
Colchicine, (287) 93
Colchicine-induced metaphase arrest, (287) 101
Colon cancer, (290) 71, (290) 87, (290) 111
Colonic bacteria, (290) 71
Colon mucosal cells, (290) 27
Colony-forming ability, (298) 53
Colony hybridisation, (288) 123
Colorectal, (290) 3
Colorectal cancer, (290) 35, (290) 97
Colorectum, (290) 13
Comet assay, (288) 47
Complementation group A, (293) 143
Complex mixture, (300) 99
Compound eye, (285) 183
Computer graphics, (291) 61
Computerized mutagenicity, (297) 97
Conditioning dose, (302) 83
Congenital anomalies, (289) 145
Conversion, (284) 97
Cooked food mutagens, (287) 261
Cooking oil vapours, (298) 105
Copper-phthalocyanine derivative, (300) 207
Copper sulphate, (302) 157
Co-recombination, (284) 185
Cotinine, (299) 103, (300) 37
Cow, (290) 311, (300) 259
Creosote-contaminated soil, (303) 77
Crossing-over, (284) 97, (284) 147
Crosslink, (289) 171
Cross-linking agents, (290) 127, (293) 99
Cross-sensitivity to radiomimetic agents, (294) 207
Crotalaria mucronata, (300) 253
Crotalaria retusa, (300) 253
C → T and tandem CC → TT mutations, induction of, (288) 291
Cu-chlorin, (287) 293
Cultured broth, (300) 201
Cultured cells, (299) 37
Curcumin, (303) 109
Cyclobutane dimer, (293) 143
Cyclobutane pyrimidine dimer, (289) 131, (293) 11, (299) 271
Cyclohexanol, (300) 151
Cycloheximide, (302) 157
CyclopentaPAH, (287) 181
Cyclophosphamide, (302) 119, (303) 151
Cyclophosphamide mutagenicity, (302) 33
CYP genes, (290) 27
Cyproterone acetate, (303) 45
Cysteine, (285) 13, (290) 231
Cytochalasin B, (287) 71, (289) 291, (301) 223
Cytochrome P450, (284) 233, (290) 27, (291) 61, (292) 199, (295) 201, (301) 165, (302) 129
Cytochrome P450 enzymes, (295) 19
Cytogenetic damage, (298) 63
Cytogenetic effects, (300) 15, (302) 39
Cytogenetic endpoints, (302) 197
Cytogenetics, (300) 119, (300) 231
Cytogenetics, transplacental, (285) 27
Cytogenotoxicity, (302) 213
Cytokinesis-blocked micronuclei, (287) 101

Cytokinesis-block method, (285) 35
Cytokinesis-block micronucleus method, (289) 291, (301) 135, (301) 223
Cytoplasm acidification, (293) 197
Cytosine, (302) 183
Cytosine arabinoside, (301) 65
Cytosine deamination, (288) 291
Cytosine, deamination to uracil, (289) 181
Cytosine to thymine transitions, (289) 181
Cytosolic epoxide hydrolase, (290) 165
Cytotoxicity, (289) 223, (290) 293, (291) 193, (292) 213, (298) 219, (301) 243

Dairy products, (290) 87
Dam, (303) 1
Damage distribution, (289) 131
Damage-repair theory, (289) 39
Database, (297) 97
dCMP hydroxymethylase, (294) 247
Decemtione EK 20, (302) 153
Deficiency syndromes, immunologic, (290) 255
Deletion, (289) 215, (299) 233, (299) 251, (301) 235
Deletion mutagenesis in T7, (288) 301
Deletions, (287) 141, (293) 241, (299) 193
Deletion screening, (288) 237
Denaturing gradient gel electrophoresis, (285) 289, (288) 103, (288) 151
Deoxyguanosine, (293) 215
Deoxynucleoside, (287) 157
Deoxyribonucleotide pools, (294) 247
DES, (300) 165
Desferrioxamine, (301) 107
Desmutagenesis, (299) 37
Desmutagenicity, (298) 247
Determinants of carcinogenicity, (303) 83
Developmental regulation, (293) 133
DFMO, (289) 107
DGGE, (288) 103
Dialkylhydrazines, (301) 213
2,7-Diaminophenazine, (302) 177
Diaminopurine-resistant mutants, (284) 287
2,6-Diaminotoluene, (301) 79
cis-Diamminodichloroplatinum(II), (291) 35
Diazepam intoxication, (298) 131
1,2-Dichloroethane, (302) 61
Dichotomy, (291) 135
Dichotomy, structural evidence for, (303) 83
Diesel emissions, (303) 91
Diet, (290) 139, (291) 141, (301) 19
Dietary component effects on GI carcinogens, (290) 127
Dietary fat, (290) 63
Dietary fibre, (284) 205, (290) 97, (290) 139
Dietary restriction, (295) 237, (295) 265
Diethyl ether, (287) 227
Di(2-ethylhexyl)adipate, (286) 135
1,2-Diethylnitrosamine, (302) 61
Diethylnitrosamine, (302) 61
Diethylstilboestrol quinone, (289) 205
Differential chromatid staining, (286) 267
Differentiation, (295) 125
Different sensitivity of CHO mutant, (285) 283
α-Difluoromethylornithine, (289) 107
1,2-Dihaloalkanes, (285) 211
Dihydrothymine, (299) 147
7,12-Dimethylbenz[*a*]anthracene, (284) 243, (292) 25, (298) 277
6,11-Dimethylbenzo[*b*]naphtho[2,3-*d*]thiophene, (292) 25
Dimethyl sulfoxide, mutagenicity, (303) 127
3,7-Dinitrofluoranthene, (298) 255
3,9-Dinitrofluoranthene, (298) 255
Dinitropyrenes, (303) 91
Dinitroso glycolurile, (290) 311
2,6-Dinitrotoluene, (301) 79
1,6-Dioxapyrene, (287) 165
2,2′-Dipyridyl, (300) 223
Direct DNA sequencing, (287) 283, (288) 237
Directed mutagenesis, the origins of, (285) 9
Directed mutation, (285) 109
Direct repeats, (288) 301, (299) 251
Division delay, (293) 161
DMBA, (292) 25, (295) 19
S-DMBA, (292) 25
DMN, (295) 19
DNA, (288) 197, (292) 113, (295) 165
cDNA, (286) 299
DNA adducts, (288) 5, (289) 265, (290) 43, (291) 147, (292) 113, (294) 117, (295) 11, (295) 31, (296) 181, (301) 79
DNA adducts, detection, (288) 39
DNA alkylation, (295) 81
DNA-binding metabolites, (286) 309
DNA breakage, (289) 83, (289) 197, (295) 47
DNA breakage, measurement, (288) 47
DNA breaking, (285) 193
DNA/bromodeoxyuridine analysis, (290) 217
DNA context, (289) 131
DNA crosslinking, (294) 255
DNA cross-links, (288) 277, (294) 235
DNA damage, (284) 111, (284) 125, (285) 109, (285) 305, (288) 31, (292) 123, (293) 173, (294) 139, (294) 299, (295) 81, (295) 93, (295) 105, (295) 237, (296) 221, (299) 183, (299) 261, (300) 223, (302) 1
DNA damage and repair, (295) 125
DNA damage-inducible genes, (289) 39
DNA damage induction, (285) 201
DNA damage, oxidative, (299) 277
DNA damage processing, (293) 91
DNA damage repair, (289) 55, (301) 275
DNA deletions, (294) 215, (299) 211
DNA diagnosis, (288) 93
DNA double-strand break repair mutants, (293) 91
DNA double-strand breaks, (285) 53
DNA double-strand breaks rejoining, (294) 101
DNA dsb, (299) 289
DNA dsb rejoining, (299) 225
DnaE gene, (292) 175
DNA excision repair, (302) 137
DNA fingerprint, (286) 165
DNA fragments, crosslinked, (285) 165

DNA joining, (293) 47
DNA ligase I, (294) 51
DNA methylation, (285) 61, (286) 217, (293) 119, (295) 63, (295) 281
DNA misrepair, (294) 9
DNA modifications, (295) 247
DNA molecules, separation, (288) 103
DNA mutational analysis, (288) 229
DNA polymerase, (292) 175, (295) 265, (299) 147, (301) 235
DNA polymerase α, (288) 229, (289) 83
DNA polymerase activity, inhibition of, (293) 71
DNA polymerase III, (288) 311
DNA polymerase III (δ), (289) 97
DNA–protein crosslinks, (302) 97
DnaQ49, (288) 311
DnaQ gene, (292) 175
DNA recombination, (294) 223
DNA repair, (285) 95, (285) 109, (289) 47, (289) 157, (289) 171, (293) 39, (293) 55, (293) 133, (293) 173, (293) 187, (293) 225, (294) 69, (294) 117, (294) 139, (294) 179, (294) 223, (294) 263, (294) 299, (294) 309, (295) 19, (295) 81, (295) 237, (298) 97, (299) 277, (301) 51, (301) 125, (301) 261, (303) 121, (303) 143
DNA, repair and mutagenesis, (289) 3
DNA repair defects, (293) 99
DNA repair enzymes, (289) 181, (294) 43
DNA repair genes, (293) 143, (293) 151
DNA repair, inducible, (302) 53
DNA repair mutants, (302) 173
DNA repair, recent advances, (293) 79
DNA repair test, (290) 175
DNA replication, (288) 229, (289) 61, (293) 133, (294) 91, (294) 309
DNA replication fidelity, (284) 307, (288) 311
DNA scanning mechanism, (294) 109
DNA sequence analysis, (287) 217, (288) 85
DNA-sequence specificity, (289) 231
DNA sequencing, (288) 123, (288) 181
DNA single-strand breaks, (285) 227, (294) 235, (294) 275, (303) 97
DNA single-strand breaks in rat hepatocytes, (292) 41
DNA single-strand scission, (287) 307
DNA strand break repair, (295) 105
DNA strand breaks, (288) 257, (291) 193, (299) 211
DNA strand damage, (293) 39
DNA strand rejoining, (294) 317
DNA, structural distortion, (289) 7
DNA synthesis, (286) 217, (289) 83, (295) 265, (301) 189
DNA synthesis, unscheduled, chemically-induced, (291) 105
DNA topoisomerase type II, (301) 87
DNA transfection, (293) 187
DNA, transitions by, (299) 123
Domain repair, (293) 55
Dominant lethality, (303) 157
Dominant lethal mutations, (302) 33
Dominant lethals, (285) 315, (296) 143
Dose response, (302) 91
Doses, single and split, (298) 169
Double-strand break, (294) 317, (299) 233
Double-strand breaks, (293) 259, (294) 21, (299) 219, (302) 25
Double-strand breaks, DNA, (288) 181, (299) 289
Double-strand breaks, DNA, rejoining, (299) 225
Double-strand DNA break, (288) 277
Double-stranded M13mp10 DNA, (289) 255
Down syndrome, (285) 69, (296) 69
Doxorubicin, (294) 215
Drosophila, (285) 211, (286) 155, (290) 175, (291) 181, (299) 29
Drosophila excision repair, (301) 51
Drosophila melanogaster, (285) 315, (298) 277, (301) 121, (301) 255, (303) 35
Drosophila melanogaster Kc, (293) 11
Drosophila somatic cells, (284) 159
Drosophila wing-spot test, (301) 201
Drug metabolism, (295) 201
Drug metabolization, (298) 81
Duplex DNA, structural defects, recognition of, (289) 7
Dye plant, (298) 91

EC Aneuploidy Project, (287) 23
Echinomycin, (288) 291
E. coli, see also Escherichia coli, (286) 293, (294) 157, (301) 125
E. coli B, (301) 1
E. coli mutator strains, (292) 175
E. coli PQ37, (303) 29
Econazole nitrate, (287) 87
Edible brown seaweeds, (303) 63
Effect modification, (302) 33
Electric fields, (297) 61
Electrochemical conductance, (288) 19
Electromagnetic field, (296) 221, (302) 39, (303) 35
Electrophilicity, (303) 83
Electrophoretic mutation screening system, (296) 129
Electroporation, (284) 321, (285) 253, (288) 207, (291) 163, (302) 75
ELF, (297) 61
ELF–EMF, (303) 35
ELISA, (292) 113
Embryo, (303) 35
EMF, (296) 221
Eμ-PIM-1 transgenic mice, (302) 61
Enantiomers of aliphatic epoxides, (298) 197
Endogenous alkylating agents, (290) 127
Endonuclease, restriction, (299) 289
Endoperoxides, (299) 183
Endosulfan, (298) 157
Energy restriction, (295) 63
Enhancement of mutation, (301) 255
Enhancing effect, (298) 163, (302) 13
Environmental mutagenesis, (291) 217
Environmental pollution, (300) 265
Enzyme induction, (301) 261
Enzyme-linked immunosorbent assay, (288) 31
Enzymes, (292) 199
Epidermal carcinogenesis, (291) 105
Epoxides, aliphatic, (299) 19
ERCC genes, (293) 151
Erythrocyte micronuclei, human, (301) 19
Erythroid differentiation, (294) 69

Escherichia coli, see also E. coli, (284) 125, (289) 205, (293) 197, (293) 249, (294) 77, (294) 91, (298) 53, (299) 157, (302) 13, (302) 53, (303) 1, (303) 127
Escherichia coli host modification, (301) 99
Escherichia coli plasmids, (286) 253
Essential gene density , (286) 199
Estimator, (292) 187, (292) 191
Ethionine, (300) 165
7-Ethoxycoumarin-deethylase, (289) 281
Ethylene oxide, (287) 283, (288) 223
Ethyl mercuric chloride, (290) 281
Ethyl methanesulphonate, (284) 243, (288) 123, (290) 145, (291) 117, (297) 313, (300) 141
Ethyl nitrosourea, (288) 113, (292) 69, (296) 129
1-Ethyl-1-nitrosourea, (297) 3
N-Ethyl-*N*-nitrosourea, (285) 221, (290) 273, (288) 151, (292) 69, (294) 127, (298) 169
Etoposide, (293) 259, (301) 189
Evaluation of genotoxicity data, (291) 87
Excision repair, (285) 211, (288) 123, (293) 233, (294) 215, (299) 219, (301) 93, (303) 19
Excision repair, Drosophila, (301) 51
Excision repair genes, (293) 151
Exclusion, (303) 143
3′ → 5′ Exonuclease, (301) 235
Exonucleolytic proofreading, (292) 175
Exposure regime, effect of, (288) 187
Exposure scenarios, (284) 297
Extended in vitro life span, (291) 125
Extrachromosomal circular DNA, (293) 205
Extremely low frequency, (297) 61

Facial eczema, (302) 71
False positive, (290) 155
Familial cancer, (284) 15
Fanconi anaemia, (284) 25, (284) 275, (289) 115, (289) 171, (293) 205, (294) 167, (294) 255
Fat, (290) 139
Fat restriction, (295) 151, (295) 181
Fecal composition, (302) 103
Fecapentaenes, (302) 103
Female genetic risk, (296) 33
Females, pre-adult, mutation rate in, (296) 107
Fenton reaction, (291) 147, (295) 47
Fertilization, (296) 43
Fetal liver micronucleus assay, (291) 29
Fetal lung epithelial cell line, (289) 281
Fibre, (295) 151, (302) 103
Fibroblasts, human, (295) 125
Fibrosis, (284) 257
Fidelity of synthesis, (295) 265
Flavonoids, (284) 243, (287) 261
Flow cytometric analysis, (290) 217
Flow cytometry, (292) 129, (292) 137, (292) 145
Fluctuation analysis, (292) 187, (292) 191
Fluctuation test, (298) 91
Fluorescence in situ hybridization, (296) 33
Fluorescence spectroscopy, (288) 19
4-Fluorochalcone oxide, (290) 165
5-Fluorodeoxyuridine, (297) 39
5-Fluoropyrimidines, (297) 39
5-Fluorouracil, (291) 29, (297) 39
Folate, (301) 19
Food additives, (290) 53
Food, genotoxicity, (290) 119
Food processing, (290) 111
Food restriction, (295) 151
Formaldehyde resistance, (289) 91
Formamidopyrimidine-DNA glycosylase, (299) 135
Forward mutation assay, (294) 247
Fotemustine, (286) 101
FPG protein, (299) 277
Frameshift, (301) 235
Frameshift mutations, (299) 111, (302) 109
Francis Ryan, (285) 9
Free-radical damages, (299) 147
Free radicals, (290) 53, (295) 191
Fried beef, (301) 19
Frontier orbitals, (287) 235
Fundamental mutation research, (285) 3
Fungi, (284) 97, (287) 23
Furocoumarins, (294) 43
ΦX174, (292) 69

Galangin, (284) 243
GalK2 gene, (292) 175
Gallic acid esters, (303) 29
Gamma radiation, *see also* γ-Radiation, (294) 139, (295) 105, (301) 255
Gamma-radiation under anoxic conditions, (289) 255
Gamma-radiation under N_2, (289) 255
Gamma T-cell receptor, (288) 269
Gap filling, (284) 97
Gas chromatography/mass spectrometry, (288) 19, (300) 207
Gasoline, leaded, (298) 1
Gastrointestinal biomonitoring, (290) 127
Gene amplification, (301) 149
Gene amplification, dynamics, (292) 17
Gene amplification, mathematical models, (292) 17
Gene conversion, (284) 3, (284) 147, (291) 181
Gene expression, (296) 3, (297) 313, (301) 165
Gene mutation, (287) 283, (296) 241, (298) 219, (301) 57
Gene *42* mutator mutations, (294) 247
Gene/point mutations, (285) 145
Genes and cancer, (286) 111
Genetic activity profile (GAP), (296) 241
Genetic activity profiles, (297) 197
Genetic analysis, (293) 65
Genetic complementation, (285) 69
Genetic control of recombination, (284) 75
Genetic disease, (288) 79
Genetic duplications, (284) 125
Genetic effects, (296) 279
Genetic influences, (286) 111
Genetic instability, (287) 141
Genetic lesions, nature of, (296) 107
Genetic monitoring, (289) 145
Genetic polymorphism for *CYP1A1*, (289) 187

Genetic polymorphism for *GST1* (class Mu), (289) 187
Genetic toxicity, (285) 27, (294) 179
Genetic toxicology, (296) 199
Genetic variation, (286) 145
GENE-TOX, (297) 97
Genomic imprinting, (296) 17, (296) 157
Genomic instability, (286) 321
Genotoxic adaptation, (300) 141
Genotoxicity, (286) 155, (288) 215, (289) 265, (296) 221, (298) 9, (299) 135, (300) 29
Genotoxicity in vivo, (292) 83, (298) 31
Genotoxicity of 1-ethyl-1-nitrosourea, (297) 3
Genotoxicity of peroxisome proliferators, (286) 135
Genotoxicity, review, (297) 101
Genotoxicity testing philosophies, (300) 73
Genotoxic potential, (297) 61
Genotypic analysis, (288) 113
Germ cells, (296) 129, (296) 167, (303) 157
Germline mutations, (287) 217
Glucose deprivation, (302) 53
Glucose effects, (285) 109
Glucose inhibition, (285) 101
β-Glucosidase, (301) 73
β-Glucuronidase, (302) 75
Glutamine–tRNA suppressor mutations, (303) 143
Glutathione depletion, (301) 255
Glyceryl trinitrate, (298) 187
Glycophorin A, (288) 163
Glycophorin A locus, (289) 115
Glyphosate isopropylamine, (300) 29
Gossypol, (297) 293
G_1 phase, (293) 161
Gpt mutagenesis, (300) 63
Granulocytes, (292) 123
Green tea, (286) 221
G2 repair, (290) 281, (295) 55, (300) 5
Griseofulvin, (300) 155
Groundwater, (300) 125
Growth factors, (296) 17
Growth kinetics, (289) 281
Growth medium, (285) 13
Growth period, (301) 213
G_2 sensitivity, (284) 195
Guanine, (287) 235
Guava antimutagenicity, (300) 1
GUS activity, (302) 75
GyrA mutant, (294) 77

Haematoporphyrin, (299) 135
Haemoglobin, (284) 297
Halogenated pyridines, (301) 57
Hamster acetyltransferase, (292) 155
Hamster *hprt* gene, (291) 117
Harmonization, (298) 291, (300) 73
Heated, (298) 105
Heat shock, (289) 165
Heat shock response, (301) 93
Heavy ions, (285) 231
Heliotrine, (285) 27
Hemin, (290) 79
Hepatic microsomal enzymes, (297) 53
Hepatocytes, (286) 123, (291) 193, (292) 105
Hepatocytes, rat, (295) 19
HepG2 cells, (292) 199
Herbicides, (300) 125
Hereditary, (290) 13
Hereditary disease, (289) 47
Heritable alterations, (284) 287
Heterochromatin, (296) 33
Heterochromatin, centrometic, interchange in, (301) 201
Heterocyclic amines, (290) 35, (290) 43
Heteroduplex, (284) 97
Heteroduplex repair, (289) 55
Heterogenous antimutagenic activity, (303) 63
Heterokaryon 12, (285) 145
Heterokaryon 59, (285) 145
Heterozygosity, loss of, (290) 3
Heterozygotes, (284) 25
Heterozygous recessive mutations, (284) 177
1-Hexyl-carbamoyl-5-fluorouracil, (291) 29
High fat, (295) 181
High frequency cells, (300) 231
High mutability, (302) 201
High-performance liquid chromatography, (287) 227
High temperature, (301) 93
L-Histidine, (301) 243
H_2O_2, (289) 197
Hordeum vulgare, (300) 141
Hormonal carcinogenesis, (289) 205
Hotspot, mutagenic, (286) 189
Hot spots, mutational, (287) 217
HPLC, (288) 5
HPRT, (285) 269, (287) 283, (288) 269
Hprt gene, (300) 63
Hprt gene, hamster, (291) 117
Hprt locus, (285) 253, (289) 115, (290) 165, (291) 163
Hprt mutations, (301) 65
H radicals, (289) 255
H-ras gene, (288) 197
HSV-1, (287) 191
Human, (295) 11
Human *APRT*, (287) 217
Human bile, (290) 303
Human blood cells, (289) 197
Human blood leukocytes, (292) 123
Human cancer, (288) 79
Human carcinogen exposures, (286) 3
Human cell extracts, (299) 251
Human diet, (300) 111
Human diploid fibroblasts, (284) 265, (287) 283
Human fibroblasts, (287) 93, (294) 149
Human genetics, (289) 47
Human hepatoma cell, (303) 151
Human HPRT gene, (294) 167
Human lymphocyte micronucleus assay, (285) 241

Human lymphocytes, (284) 195, (285) 35, (286) 321, (290) 165, (291) 93, (292) 165, (294) 117, (295) 55, (295) 135, (298) 63, (300) 45, (300) 135, (301) 135, (302) 191
Human lymphocyte subpopulations, (286) 181
Human oesophageal and gastric cancers, (292) 41
Human oocyte, (296) 69
Human peripheral lymphocytes, (286) 281
Human plasma, (292) 165
Human population monitoring, (285) 269
Human T-cell lymphocytes, (288) 173
Human T-lymphocytes, (286) 209, (288) 269, (291) 207
Humic acids, (299) 37
Hydrazines, (301) 213
Hydrogen peroxide, (285) 227, (301) 243, (303) 29
Hydrogen peroxide pre-exposure, (301) 135
Hydrogen peroxide-resistant cells, (299) 95
Hydrophilic agents, (291) 135
Hydrophobicity, (287) 235
Hydroquinone, (287) 87
4-Hydroxyalkenal, (290) 183
N^4-Hydroxycytidine, (285) 145
8-Hydroxy-2′-deoxyguanosine, (285) 297
8-Hydroxy-2-deoxyguanosine, (295) 165
6-Hydroxy-5,6-dihydrothymine, (293) 71
8-Hydroxyguanine, (299) 135, (299) 277
Hydroxylamine, (288) 65, (301) 73
Hydroxyl radical, (285) 227
5-Hydroxymethyl-2′-deoxyuridine, (301) 229
5-Hydroxymethyl-2-furaldehyde, (290) 111
4-Hydroxynonenal, (293) 1
Hydroxypyrene, (300) 231
Hydroxyurea, (293) 215
Hyperdiploidy, (301) 267
Hyperthermia, (289) 165
Hypoxanthine-guanine phosphoribosyltransferase (hprt), *see also* HPRT *and* Hprt (286) 209
Hypoxanthine phosphoribosyltransferase, (288) 229

I-compounds, (295) 11, (295) 31, (295) 247
Identification, (300) 207
Imidazole, (298) 71
Immature oocyte, (287) 243
Immortalization, (284) 265
Immune deficiency, (293) 47
Immunoaffinity chromatography, (288) 31
Immunofluorescence, (289) 223
Immunologic deficiency syndromes, (290) 255
Incision activity, (294) 149
Indenestrol A, (289) 223
Indenestrol B, (289) 223
Indigestible polysaccharide, (284) 205
Indirect effect, (289) 255
Induced toxicity, (295) 151
Industrial region, (300) 259
Inflammation, (294) 299
Influence of the distance between direct repeats on deletion formation, (299) 233
Influence of the length of direct repeats on deletion formation, (299) 233
Inhibition of DNA replication, (302) 165
Inhibitors, (289) 157
Inorganic lead, (302) 33
Inorganics, (290) 53
Insertional inactivation, (289) 297
Insertional mutation, (284) 53
Instrumental analysis, (287) 227
Intercalation, (289) 157
Interchromosomal recombination, (285) 211
Interferon-α, (300) 195
Interferon-β, (300) 195
Interphase chromosome damage, (294) 199
Interpretation of individual genotoxicity findings, (291) 87
Intervention studies, (290) 119
Intrauterine growth retardation, (296) 211
In vitro fertilisation, (300) 247
In vitro mitogenic stimulation, (292) 213
In vitro mutagenicity, (297) 281
In vitro recombination, (291) 181
Ionizing radiation, (284) 257, (289) 197, (293) 99, (299) 211, (299) 225, (299) 313, (301) 171, (301) 243
IQx derivatives, (298) 207
Irs1 cells, (293) 187, (294) 199
Isolated rabbit lung cells, (285) 305
Isothiocyanates, (300) 111

Japanese Environmental Mutagen Society, (292) 259

Karyotype analysis, (298) 149
Keratinocytes, (294) 235
Keratinocytes, epidermal, human, (291) 105
Kidney, (295) 31
Kinetics, (290) 193, (292) 3
Kinetics, zero- and first-order, (284) 297
Kinetochores, (287) 71

LacI, (288) 85, (288) 123, (288) 133
LacZ, (302) 13
LacZ α-complementation reversion assay, (288) 291
LacZ mutation, (285) 221
Lac Z^- mutation data, (292) 25
Lambda shuttle vectors, (301) 99
Laminaria japonica (Makonbu), (303) 63
Landfill, solid waste, municipal, (298) 125
β-Lapachone, (288) 263
Leachate, (298) 125
Lead, (285) 117
Lead nitrate, (302) 157
Lead salts, mutagenicity, (298) 97
Leprosy patients, untreated, (284) 251
Lethal damage, (301) 171
Lethal mutations, (299) 29
Letter to the editor, (298) 141
Leukemia, childhood, acute, (303) 11
LexA mutation, (293) 241
Lifespan, (295) 247
Ligation-mediated PCR, (288) 39
Lipid peroxidation, (293) 1
Lipophilicity, (291) 135

Liquid holding, (301) 267
Liquid holding recovery, (289) 55, (302) 53
Liver, (285) 297, (295) 31, (295) 63, (302) 1
Liver alkaline phosphatase, (302) 207
Liver tumorigenesis, (296) 181
Lofepramine, (286) 155
Loss of heterozygosity, (284) 15
Low-dose radiation, (298) 141
Low dose X-rays, (303) 157
Low fat, (295) 181
Lumiflavin, (298) 9, (298) 17
Lung cancer, (298) 105
Lung cancer induction, (303) 91
L5178Y cells, (300) 165
L5178Y mouse lymphoma cells, (285) 175
Lymphoblastoid cell lines, (286) 233
Lymphoblastoid, human, cell lines, (284) 287
Lymphoblasts, human, (289) 245
Lymphocyte cultures, (290) 211, (300) 259
Lymphocytes, (285) 45, (291) 141, (292) 123, (293) 39, (294) 149, (295) 105, (301) 243
Lymphocytes, B, (293) 173
Lymphocytes, human, (295) 71, (301) 171
Lymphocytes, human, cultured, (289) 139
Lymphocytes, human peripheral blood, (287) 101
Lymphocytes, human T-cell, (288) 173
Lymphocytes, rat, (298) 169
Lymphocyte subsets, (289) 187
Lymphocyte tests, (299) 19
Lymphoma, (290) 255
Lysogenic induction, (286) 173

Macromolecules, alkylation, (284) 297
Magnetic fields, (297) 61
Magnetic microcapsules, (290) 127
Maillard reaction, (285) 193
Maize, (299) 1
Malaria, (292) 129
Male germinal cells, (298) 145
Maleic hydrazide, (300) 141, (302) 157, (302) 161
Male mice, (303) 45
Malformations, (296) 167
Mammalian cells, (284) 53, (289) 27, (298) 97, (299) 289
Mammalian cells in vitro, (284) 37, (287) 113
Mancozeb, (298) 157
Maprotiline, (286) 155
Marine pollutant, (300) 5, (301) 195
Maternal age effect, (296) 69
Maternal effect, (285) 315, (296) 157
Mating type switching, (284) 111
MAT locus, (290) 239
Medicinal plant, (303) 135
Meeting report, (291) 217, (293) 79
Mei-41^{D5}, (290) 175
Mei-9^{a}, (290) 175
Mei-3, (294) 223
Meiosis, (296) 57
Meiotic delay, (301) 249
Melanoma, (300) 119
Membrane-transport system, energy-dependent, (285) 79
6-Mercaptopurine, (296) 279
Mercury, (299) 95
Mer phenotype, (293) 119
Metabolic activation, (284) 233, (287) 181, (291) 93, (298) 261, (300) 91
Metabolic activation by *N*,*O*-acetyltransfer and *O*-acetylation, (292) 155
Metabolic effects of dietary fibre NSP, (290) 127
Metabolism, (285) 305, (301) 261
Metal-induced site-specific damage, (285) 165
Methimazole, (300) 57
Methotrexate, (303) 113
Methotrexate resistance, (285) 201, (291) 43
Methoxyacetaldehyde, (298) 219, (300) 273
Methoxyacetic acid, (298) 219
2-Methoxyethanol, (298) 219, (300) 273
8-Methoxypsoralen, (292) 251
3-Methyladenine-DNA-glycosylase, (293) 187
Methyl 2-benzimidazolecarbamate, (300) 15
Methyl chloride, (293) 249
5-Methylcytosine, (285) 61
5-Methylcytosine monophosphate, (286) 217
O^6-Methyldeoxyguanine, (288) 197
Methylene blue, (299) 135
7-Methylguanine, (295) 81
O^6-Methylguanine, (303) 143
O^6-Methylguanine-DNA methyltransferase (MGMT) gene, (293) 119, (293) 225
Methyl mercuric chloride, (290) 281, (300) 141
Methylmercury chloride, (301) 267
Methyl methanesulphonate, (289) 139, (294) 1, (294) 21, (294) 179, (301) 65
N-Methyl-*N'*-nitro-*N*-nitrosoguanidine, (294) 1, (298) 163, (302) 13, (303) 135
N-Methyl-*N*-nitrosourea, (288) 197, (295) 81
1-Methyl-2-pyrrolidinone, (298) 149
Methyl thiophanate, (300) 15
N-Methyl-valyl-amiclenomycin, (286) 293
Metrifonate, (300) 135
Mezerein, (284) 185
Mianserin, (286) 155
Mice, (284) 185, (287) 207
Microbial genetics, (285) 9
Microcapsules with removable targets, (290) 127
Microcell-mediated chromosome transfer, (293) 31
Micronucleated cells, (291) 35
Micronucleated polychromatic erythrocytes, (292) 63
Micronuclei, (285) 27, (286) 123, (286) 181, (287) 71, (287) 93, (288) 223, (289) 281, (290) 119, (292) 83, (292) 105, (292) 213, (294) 299, (298) 31, (298) 131, (300) 165, (300) 201, (300) 231, (301) 57, (301) 149, (301) 223, (302) 71, (303) 11, (303) 121, (303) 151
Micronuclei, induction, (287) 87, (291) 79
Micronucleus, (292) 231, (299) 1, (300) 29, (300) 281, (301) 195, (303) 77, (303) 97
Micronucleus assay, (292) 129, (292) 137, (292) 145
Micronucleus assay, human lymphocytes, (285) 241
Micronucleus assay, in vitro, (298) 227

Micronucleus counts, (295) 135
Micronucleus distribution, (291) 29
Micronucleus induction, (298) 25, (301) 45
Micronucleus inhibition, (301) 107
Micronucleus, in vitro, (291) 93
Micronucleus quantitation, comparative, (302) 119
Micronucleus technique, (285) 35
Micronucleus test, (284) 215, (284) 243, (289) 187, (298) 149, (298) 215, (300) 215, (302) 207, (303) 109
Micronucleus test with V79 cells, (303) 163
Microtubule, (296) 57
Microtubule assembly, (287) 17, (289) 223
Microtubule organizing centers, (296) 57
Minisatellite DNA, (286) 165
Mismatch repair, (285) 61, (288) 311, (294) 1, (297) 313
Misrepair, (299) 251
Mitochondria, (296) 157
Mitochondrial mutagenesis, (298) 113
Mitochondrial mutations, (295) 93
Mitomycin C, (285) 165, (285) 221, (287) 141, (287) 275, (289) 171, (290) 145, (291) 117, (294) 255, (301) 195, (303) 151
Mitosis, (300) 165, (300) 281
C-Mitosis, (287) 57
Mitotic crossing-over, (289) 157
Mitotic gene conversion, (299) 9
Mitotic index, (301) 13
Mitotic/meiotic index, (299) 29
Mitotic recombination, (284) 147, (290) 239
M13mp10 bacteriophage DNA, (299) 165, (303) 135
Models, (289) 27
Molecular analysis of mutations, (294) 167
Molecular analysis of viable mutations, (288) 187
Molecular dosimetry, (288) 19
Molecular mutagenesis, (288) 237
Molecular structure, (291) 61
Molt-3 cell line, (285) 227
Monocrotaline, (285) 27, (300) 253
Monocrotophos, (292) 231
Mononuclear leucocytes, (288) 257
Monooxygenases, (292) 51
Morphogenesis, (285) 183
Mosaicism, (284) 15
Mosaics, mutational, (296) 107
Mouse, (285) 45, (291) 29, (291) 141, (295) 247, (296) 143, (296) 167, (299) 1
Mouse bone marrow, (287) 275, (300) 135
Mouse bone marrow cells, (287) 119
Mouse germ cells, (294) 179
Mouse L cells, (293) 91
Mouse-lymphoma assay, (286) 299
Mouse lymphoma cells, (301) 57
Mouse-lymphoma *tk* gene, (290) 145
Mouse oocytes, (296) 135
Mouse primordial germ cells, (290) 273
Mouse skin, (292) 25
Mouse spermatocytes, (287) 119
Mouse splenocytes, (301) 223
Mouse strains, (286) 145
Mucin, (290) 71
Multidrug resistance and mutagenesis, (285) 79
Multigeneration carcinogenesis, (287) 207
Multilocus deletion mutations, (285) 145
Multiple-locus mutations, (285) 145
Multiple-site carcinogen, (286) 75
Multiplex PCR, (288) 237
Municipal incinerator ash, (301) 39
Muntjac cell line, (300) 111
Mus 115, (301) 121
Mussel, (301) 113
Mutagen, (284) 37, (284) 125
Mutagen-chlorophyllin complexes, (287) 293
Mutagenesis, (288) 249, (298) 53, (302) 39
Mutagenesis and carcinogenesis, (299) 165
Mutagenesis assay, (286) 299
Mutagenic activity, (298) 207, (302) 153
Mutagenicity, (286) 243, (290) 165, (292) 155, (297) 181, (298) 261, (300) 151, (300) 207, (300) 265
Mutagenicity inhibition, (300) 57
Mutagenicity reduction, (293) 197
Mutagenicity testing, (286) 165
Mutagenic potential, (285) 79
Mutagen sensitivity, (301) 121
Mutant analysis, (291) 207
Mutant cell lines, (293) 99
Mutant frequency, (292) 187
Mutant selection for deletion enhancement, (299) 193
Mutation, (289) 39
Mutational specificity, (288) 123, (289) 131, (294) 215
Mutational spectrum, (285) 145, (289) 231, (302) 13
Mutation analysis, (288) 181, (301) 99, (302) 75
Mutation assay, in vivo, (302) 91
Mutation detection, (288) 65
Mutation epidemiology, (296) 211
Mutation frequencies, (298) 145
Mutation rate, (288) 229, (289) 245, (292) 191
Mutation spectrum, (288) 133, (294) 29
Mutator, (285) 91, (288) 229, (289) 97
Mut7-1 (= *cdc2*), (289) 97
MutM, (299) 277
MutT, (299) 277
MutT editing, (284) 307
MutY, (299) 277
MX, (299) 25
MX compounds, (287) 235
c-*Myc*, (303) 113
Myleran, (300) 77

Nafenopin, (286) 135
α-Naphthoflavone, (301) 113
Naphthyridones, (298) 227
Near-ultraviolet light, (298) 31
Neighbouring bases, (288) 197
Neomycin resistance, (291) 181
Neurospora crassa, (294) 223
Neutral red, (291) 21
Neutrophils, (293) 173
Nickel, (299) 55, (300) 179
Nickel carcinogenesis, (291) 147

Nickel chloride, (300) 63
Nickel oxides, (300) 63
Nickel sulphides, (300) 63
Nicotiana tabacum, (299) 111
Nitric oxide, (298) 187
Nitrite treatment, (303) 135
Nitroarenes, (291) 171, (292) 51, (297) 181, (301) 7
Nitrocarbazoles, (299) 63
Nitrofluoranthene, (297) 181
Nitrogen mustard, (301) 121
Nitroglycerin, (298) 187
2-Nitropropane, (285) 297, (287) 157
Nitroreductase, (291) 171
N-Nitrosamines, (285) 297
N-Nitrosodiethylamine, (300) 151
N-Nitrosodimethylamine, (290) 311
4-(*N*-Nitrosomethylamino)-1-(3-pyridyl)-1-butanone, (300) 151
Nitrous acid, (287) 141
NLM, (297) 97
Nonaberrant cells, (301) 171
Noncarcinogens, genotoxic, (290) 155
Noncarcinogens, mutagenic, (290) 155
Nongenotoxic carcinogens, putative, (296) 241
Non-Hodgkin's lymphoma, (284) 223
Nonhomologous recombination, (285) 53
Non-protein SH, (300) 141
Non-replicating cells, (285) 101
Non-starch polysaccharides (NSP), (290) 97
N-*ras*, (285) 289
dNTP pool imbalance, (289) 73
Nuclear extracts, (291) 181
Nuclear mutagenesis, (298) 113
Nucleoside analogues, (287) 191
Nucleoside monophosphate kinase, (286) 217
Nucleoside salvage, (286) 217
Nucleotide excision repair, (289) 7, (293) 11
Nucleotide excision repair-proficient strain, (285) 145
Null mutations, (287) 191
Numerical chromosome aberrations, (287) 57

Occupational exposure, (286) 275, (299) 103, (302) 19, (302) 197
Ochratoxin A, (289) 265
Oestradiol, (303) 45
Oestrogens, genetic effects, (289) 205
O^2-ethyldeoxythymine, (294) 127
OH radicals, (299) 165
Okadaic acid, (289) 275
Oncogene activation, (295) 281
Onion, (299) 29
Oocyte, (296) 43, (296) 129, (296) 143
Oocytes, arrested, mutations in, (296) 107
Oocytes, mature and maturing, mutations in, (296) 107
Oocytes, mouse, (300) 155
Oogenesis, (296) 3, (296) 57, (296) 89
OPP pesticide chemical mutagenicity database, (297) 197
Organolead compounds, (298) 1
Organotin compounds, (300) 265
Organotins, (300) 5, (301) 195
Osmium tetroxide, (288) 65
Ovulation, (296) 89
Oxidants, (293) 173
Oxidative damage, (287) 165, (294) 43
Oxidative DNA damage, (285) 297, (295) 1, (295) 181, (299) 165, (299) 277
Oxidative stress, (288) 215
8-Oxo-7,8-dihydrodeoxyguanosine, (287) 157
8-Oxoguanine, (299) 277
Oxygen, (294) 255
Oxygenation, (285) 315
Oxygen-derived radicals, (299) 165
Oxygen free radicals, (289) 181, (291) 147, (301) 243
Oxygen radicals, (295) 165

PAH, (303) 77
Palindromes, (299) 193
Papillae, (285) 91
Papillation assay, (292) 175
Paracetamol, (296) 199, (298) 139
Parental disomy, (284) 15
PCR, *see also* Polymerase chain reaction, (288) 85, (288) 93, (288) 103, (302) 75
PCR amplification, (287) 217
PCR, ligation-mediated, (288) 39
PCR-SSCP, (288) 79
Peripheral blood, (292) 129
Peripheral blood erythrocytes, (292) 231
Peripheral blood lymphocytes, (286) 275
Peripheral blood micronucleus assay, (285) 221
Peripheral blood micronucleus test, (302) 61
Peripheral blood, rat, (291) 79
Peripheral blood reticulocytes, (302) 177
Peripheral lymphocytes, (299) 25
Peroxides, mutagenic, (287) 227
Peroxisome proliferator, (286) 123
Peroxisome proliferators, genotoxicity, (286) 135
Persistent nicks, (299) 211
Pesticide chemicals, (297) 197
Pesticides, (285) 241, (300) 125, (302) 1
Pfu, (303) 171
Phage C21, (301) 1
Phagemid constructs, (285) 289
Phage reactivation, (286) 173
Phage T4, (294) 247
Phagocytes, (288) 257
Phenazine, (302) 177
Phenolics, (303) 97
Phenols, (284) 185
Phenylbenzoquinone, (286) 309
Phosphamidon, (298) 157
Photoaddition, (294) 43
Photodynamic action, (288) 215
Photomutagenicity, (298) 17
(6–4) Photoproduct, (293) 143, (293) 233
Photoreactivation, (290) 239
Photorepair, (301) 51
Photosensitization, (299) 135
Physical chemical properties, (297) 281

Pig lymphocytes, (292) 165
Pig plasma, (292) 165
Pine cone extract fraction VI, (297) 53
P450 1A1, (284) 233
P450 inhibition and induction, (300) 151
pKM101, (293) 241, (301) 7
Plant cell/microbe coincubation assay, (299) 111
Plant cell walls, (290) 97
Plasmid, (284) 125, (299) 233
Plasmid loss, (301) 157
Plasmids, *E. coli*, (286) 253
Plasmid stability, (289) 91
Plasmid transfection, (294) 9
Plasmid transformation efficiency, induction of, (290) 239
Plating efficiency, (292) 187
Platinum complexes, (298) 269
Pleiotropy, (290) 239
Pleurodeles waltl, (292) 83
Ploidy, (289) 17
Point mutation, (288) 79
*Pol*A, (303) 1
Po-lei tea, (286) 221
Polyacrylamide gel electrophoresis, (285) 165
Poly(ADP-ribose) polymerase, (302) 1
Poly (ADP-ribose) polymerase inhibition, (284) 251
Polyamines, (289) 107
Polyaromatic hydrocarbons, (303) 77
Polychlorobiphenyl, (301) 113
Polychromatic erythrocytes, (288) 223, (292) 105
Polycyclic aromatic hydrocarbons, (290) 175, (292) 51, (298) 31, (300) 207, (300) 231, (303) 91
Polymerase, (285) 13
Polymerase chain reaction, *see also* PCR (287) 283, (288) 103, (288) 113, (288) 151, (288) 173, (288) 181, (291) 163, (291) 181, (301) 65
Polymerase fidelity, (303) 171
Polymorphism, (288) 93
Polyphenol, (303) 29
Polyposis, (290) 13
Population monitoring, (285) 35, (291) 207
Post-irradiation recovery, (289) 17
^{32}P-Postlabelling, (286) 309, (288) 5, (291) 147, (292) 25, (295) 31, (295) 247, (301) 79
^{32}P-Postlabelling analysis, (292) 113, (301) 125
Potentiating effect, (300) 5
Potentiation of chromosome aberrations, (290) 281
Potent S9 inducer, (302) 129, (295) 31
Praziquantel, (298) 179
Precedents or possibilities, (298) 291
Prediction programme, toxicity, (302) 7
Prediction strategies, (298) 291
Predictive tests, (290) 155
Preimplantation mouse embryo, (299) 313
Premature chromosome condensation, (294) 199
Primate cell line, (301) 183
Procarcinogens, (284) 233
Procedures, (297) 235
Processivity, (294) 109
Proflavin, (286) 189, (299) 135
Progestin, (300) 215
Proliferation, (286) 181, (290) 87
Proliferation rate index, (300) 45
Promutagens, (299) 111
Pronucleus, (296) 43
Proofreading, (284) 307, (288) 311
Propylene oxide, (288) 223, (299) 85
Prostaglandin H synthase (EC 1.14.99.1), (302) 45
Protamine, (296) 43
Protective devices, (302) 19
Protective effects, (303) 109
Protein-associated DNA-strand breaks, (302) 97
Protein restriction, (295) 151, (295) 165
Proteins, blood, (284) 297
Protein synthesis inhibition, (302) 157
Protein thiols, (299) 261
Proto-oncogene, (288) 113
Psoralen photolesions, (294) 167
Pulmonary toxicants, (285) 305
Pulsed-field electrophoresis, (299) 219
Pulsed-field gel electrophoresis, (291) 193
Purification system, (298) 91
Pyridines, halogenated, (301) 57
Pyrimidine deamination, (302) 183
Pyrimidine dimer excision, (290) 249
Pyrimidine modifications, (293) 71
Pyrimidine photodimers, (295) 125
6-4 Pyrimidine photoproduct, (299) 271
(6–4) Pyrimidine pyrimidone photoproduct, (289) 131
Pyrimidine-ring fragmentation products, abasic sites, (299) 147
Pyrostase, (303) 171
Pyrrolizidine alkaloids, (300) 253

QSAR, (287) 235
Quinolones, (298) 227

Rad genes, (293) 233, (294) 59
Radiation, (286) 181, (289) 27, (296) 135
γ-Radiation, *see also* Gamma, (284) 223, (292) 123, (303) 109
X-Radiation, (286) 321, (287) 207, (290) 201, (294) 149
Radiation dose protraction, effect on mutation yield of, (296) 107
Radiation-induced, (294) 275
Radiation-induced cell death, (285) 183
Radiation-induced cell killing, (294) 199
Radiation-induced mutagenesis, (289) 255, (299) 165
Radiation resistance, (293) 31
Radiation sensitization, (299) 261
Radiation survival-curve shoulder, (285) 261
Radioadaptive response, (302) 83
Radioimmunoassay, (288) 31
Radioprotection, (290) 231, (301) 143
Radioresistance, (289) 17
Radiosensitive mutant, (299) 297
Radiosensitivity, (285) 69, (290) 201, (293) 47
Random mutation, (285) 109
Rapeseed cooking oil, (298) 105
RAS oncogene, (290) 3
Rat, (295) 11, (295) 247

Rat erythro-blastic leukemia cells, (300) 241
Rat hepatocytes, (291) 21, (292) 213, (301) 261
Rat liver, (302) 129
Rat lung microsomes, (284) 233
Rat offspring, (295) 113
Rat stomach, (287) 307
Rat, testes, (301) 189
X-Ray induction, (286) 233
Rays, *see also* Radiation
γ-Rays, *see also* Gamma, (291) 213, (302) 83
X-Rays, (285) 315, (290) 231, (290) 255, (292) 83, (296) 167
X-Rays, low-dose, (301) 171
Reactive oxygen species, (289) 215, (295) 1, (299) 165
RecA-like protein, (294) 223
RecA mutation, (293) 241
RecBC, (299) 193
Recessive lethals, (285) 315
Recessive mutations, (290) 273
RecF, (294) 157
Reciprocal recombination, (284) 177
Reciprocal translocation, (303) 157
RecO, (294) 157
Recombinagens, (284) 125
Recombinant DNA, (291) 181
Recombination, (284) 3, (284) 37, (284) 125, (284) 159, (285) 45, (289) 91
Recombinational mutation, (286) 165
Recombination mechanism, (284) 75
Recombination repair, (294) 157
Recombination, UV-stimulated, (294) 309
Recombinogenicity, (286) 243
Recovery of DNA replication, (294) 91
RecR, (294) 157
Regulatory requirements, (292) 241, (292) 251
Rejoining in different phases of the cell cycle, (294) 275
Relative clastogenicity, (285) 211
Renin inhibitor, (298) 237
Repair, (289) 39
Repair and increase of DNA damage, (295) 1
Repair deficiency, (288) 277
Repair-deficient mutants, (285) 315
Repair endonucleases, (299) 135
Repair, in vitro, (299) 251
Repair kinetics, (284) 195
Repair of UV damage, (294) 59
Repair pathways, (294) 59
Repetitive DNA, (284) 321
Replication, (290) 217
Replication fidelity, (294) 247
Replication fork progression, (303) 71
Replication index, (290) 317, (302) 197
Replicative DNA synthesis, (287) 307
Reproducibility, (292) 137
Reproductive effects, (296) 143
Resistance, (303) 19, (303) 113
Resolution, (292) 129
Respiratory carcinogenesis, (289) 281
Respiratory epithelium, transformation, (300) 179
Restriction endonuclease, (299) 289, (302) 25
Restriction enzymes, (285) 53, (285) 253, (299) 225, (302) 75
Restriction fragment length polymorphism, (288) 113, (288) 173
Retinoblastoma, (284) 15
Retroposon, (284) 53
Retroviral vectors, (289) 297
Reverse mutation, (299) 9
Reverse transcription, (288) 269
Revertant XRS-5, (285) 261
Riboflavin, (298) 9, (298) 17, (299) 135
Ribonucleotide reductase, (293) 215
Ring chromosomes, (294) 199
Risk assessment, (295) 151
River water, (300) 207
RNA, (295) 165
RNA phenotyping, (286) 209
RNA/RNA solution hybridization, (286) 209
RNA splicing errors, (288) 237
Rodent bioassay, (286) 111
Rodent carcinogenesis, (303) 83
Rodent carcinogenicity, (291) 61, (297) 281
Rodent carcinogens, (286) 3
Rodent cell lines, (293) 99
Rodents, (300) 125
Rodent toxicity, (297) 281
Rogor, (299) 29
Rooibos tea, (286) 221
Rose Bengal, (288) 215
Roundup, (300) 29

S9, (291) 53, (298) 9, (300) 91
Saccharomyces cerevisiae, (284) 111, (284) 147, (287) 165, (289) 97, (290) 239, (293) 233, (299) 157, (302) 153
Saccharomyces cerevisiae, D7, (292) 241
Safety evaluation, (291) 61
Salmonella, (290) 53, (300) 29, (300) 91
Salmonella/microsome assay, (299) 45
Salmonella/microsome assay, Ames, (298) 125
Salmonella/microsome test, (302) 129
Salmonella mutagenicity, (292) 41, (298) 197, (299) 85
Salmonella/reversion assay, (287) 261
Salmonella strain SAT138, (292) 155
Salmonella typhimurium, (284) 125, (285) 95, (285) 101, (287) 165, (290) 165, (291) 171, (293) 197, (298) 53, (298) 187, (298) 261, (301) 157, (302) 153, (303) 127
Salmonella typhimurium TA100, (301) 213
Salmonella typhimurium TA102, (301) 213
Salmonella typhimurium TA104, (303) 29
Salmonella typhimurium TA98 and TA100, (298) 269
Salmonella YG strains, (303) 55
Sampling time, (292) 3, (303) 101
Satellite DNA, (284) 321
Sau3AI, (285) 253
SCF, *see* Sister-chromatid exchange
SCGE, (288) 47
Schistosoma infection, (298) 179
Schizosaccharomyces pombe, (294) 59
Scid mutation, (288) 277
Secale, (302) 201

Seed-residual mercury, (300) 141
Selectable system, (288) 133
"Sensitized" spermatogonia, (288) 187
Sequence, (286) 299
Sequence analysis, (298) 187
Sequence of DNA molecules, separation based on, (288) 103
Sequence specificity, (288) 197
Sequencing, (285) 289
Sex chromosomes, (296) 157
Sex hormone, (300) 247
Sex-specific mutagenesis, (296) 157
SHE cells, (303) 121
Short-term test data, (296) 241
Shuttle vector, (288) 133, (288) 249, (299) 183
Shuttle vector, pHAZE, (299) 225
SIMA (Italian Section of the European Environmental Mutagen Society), (291) 217
Simulation, (292) 191
Single-base substitution, (285) 289
Single-cell gel electrophoresis, (288) 47, (292) 123
Single-strand breaks, (294) 139, (294) 179
Single-stranded DNA, (288) 249
Singlet oxygen, (284) 275, (285) 193, (287) 165, (298) 17, (299) 135, (299) 165, (299) 183
Singlet oxygen-induced mutagenesis, (299) 165
Single UV photoproducts, (299) 157
Sister-chromatid exchange, (284) 215, (285) 117, (286) 123, (286) 145, (286) 267, (286) 281, (288) 223, (288) 263, (288) 281, (289) 107, (289) 275, (290) 165, (290) 311, (292) 165, (297) 101, (298) 197, (299) 1, (299) 9, (299) 25, (299) 37, (299) 55, (300) 45, (300) 125, (300) 135, (300) 195, (300) 231, (300) 247, (300) 259, (301) 13, (301) 87, (301) 267, (302) 25, (302) 197
Sister-chromatid exchange detection, (292) 205
Sister-chromatid exchange, frequency, (289) 139
Sister-chromatid exchange induction, (300) 37, (300) 241, (303) 71
Sister-chromatid exchange, persistence, (287) 275
Sister-chromatid exchanges, SGEs, (302) 213
Site-directed mutagenesis in single cells, (299) 123
Skin, (291) 105
Skin fibroblasts, (293) 205
Small polydisperse circular DNA, (293) 205
Smear methodology, standard, (302) 119
Smoking, (298) 285
Sodium arsenite, (284) 215, (302) 97
Sodium dithionite, (285) 165
Sodium fluoride, (290) 293, (301) 183
Sodium *o*-phenylphenol, (286) 309
Solid-waste incinerators, (301) 39
Solvent effects, (298) 269
Somaclonal variation, (302) 201
Somatic cells, (286) 155
Somatic mutation, (284) 15, (288) 163, (300) 49
Somatic mutations, in vivo, (287) 217
Somatic segregation, (288) 163
SOS bypass, mutagenesis, (299) 147
SOS chromotest, (286) 243, (291) 53, (297) 235, (300) 99
SOS mutagenesis, (288) 207
SOS repair, (299) 193
SOS response, (286) 173, (293) 1, (303) 1, (303) 29
SOS system, participation, (286) 253
Southern blot analysis, (286) 199
Southern blotting, (287) 283
Soybean, (300) 49
Soybean cooking oil, (298) 105
Specific-locus mutations, (288) 187
Specific-locus systems, (298) 145
Sperm, (296) 43
Spermatids, (292) 105
Spermatogenesis, (290) 193, (294) 139
Spermatogenic stage, effect of, (288) 187
Spermatogonial stem cells, (290) 193, (290) 201
Sperm chromatin, (296) 33
Sperm decondensation, (296) 43
S phase, (293) 161
Spice, (303) 135
Spindle disturbances, (301) 249
Spindle poison, (287) 17, (287) 29
Spleen, (292) 63
Splicing, (294) 29
Spontaneous mutagenesis, (289) 231
Spontaneous mutant increase, (298) 237
Spontaneous mutations, (287) 191, (289) 115, (302) 173
Spontaneous mutations in females, (296) 107
Sporidesmin, (302) 71
Spot test, (284) 177
Squamous epithelial carcinoma, (291) 105
SSBs, (294) 275
SSCPA, (303) 171
SSCPA, analyses by, (288) 85
SSCPA, limitations in the use of, (288) 85
Static electric, (297) 61
Static magnetic, (297) 61
Stationary phase, (302) 173
Stem-cell spermatogonia, differences among, (288) 187
Steroid-induced damage and repair, (298) 53
Strain comparison, (295) 31
Strain dependency, (287) 227
Strain difference, mice, (301) 45
Strand specificity, (299) 271
Stratification of bioassay results, (286) 111
Streptolysin O, (302) 25
Streptomyces, (286) 293
Streptomyces ambofaciens, (287) 141
Structural nature of mutations, (288) 187
Structure-activity relationships, (290) 183, (298) 31, (298) 261, (299) 85
Structure–carcinogenicity relationship, (302) 7
Styrene metabolites, (302) 213
Styrene 7,8-oxides, (290) 165
Sucrose, (290) 111
Sulphoethylglucan, (302) 207
Sulphur dioxide, (298) 63
Sulphur mustard, (294) 235
Sunscreen, (292) 241, (292) 251
Superoxide anion, (285) 227

Superoxide dismutase, (285) 227, (288) 215, (289) 215, (295) 191, (300) 223
Superoxide radicals, (298) 17
Supersensitive yeast mutant, (289) 55
SUP4-o gene, (289) 73
Suppression of sister-chromatid exchange, (302) 165
Suppressor mutations, (297) 313
Survival frequency, (303) 35
SV40, (294) 309
SV40 T antigen, (284) 265
Swi genes, (294) 59
Swiss albino mice, (300) 215
Synaptonemal complex, (303) 45
Synchronized human fibroblasts, (290) 293
Synergistic effect, (301) 229

T7, (301) 235
*Tag*A, (303) 1
Taq, (303) 171
Target organ, mutagenicity, (286) 75
T4 bacteriophage, (294) 247
TCDD, (284) 185
Testosterone, (303) 45
Test protocols, (298) 291
Test results, synopsis, (287) 131
Test system development, (287) 3
12-*O*-Tetradecanoylphorbol-13-acetate, (287) 207
1-(2-Tetrahydrofuryl)-5-fluorouracil, (291) 29
Textiles, mutagenic activity, (299) 45
Thiocyanate, (300) 231
Thioguanine resistance, (291) 163
Thioguanine-resistance mutation, (299) 9, (300) 223
6-Thioguanine-resistant, (285) 269
Thioguanine-resistant mutant, (289) 215
6-Thioguanine-resistant T-lymphocytes, (298) 169
Thiol depletion, (299) 261
Thiols, (295) 1, (299) 183
Three-way immunoperoxidase staining, (292) 205
ThyA mutants, (285) 91
Thymidine kinase, (286) 299, (287) 191, (289) 231, (289) 297, (294) 247
Thymidylate synthase gene, (286) 189
Thymine glycol, (299) 147
Thymine hydrates, (293) 71
Thymineless death, (289) 83
Tissue polypeptide antigen, (299) 55
tk, (284) 321
TK6 cells, (289) 245
tk gene, (290) 145
T-lymphocytes, (285) 269, (288) 155
Tn10 excision, (299) 193
Tn*10* precise excision, (293) 241
α-Tocopherol, (303) 97
TOPKAT predictions, (302) 7
Topoisomerase, (286) 243
Topoisomerase I, (288) 263
Topoisomerase II, (286) 189, (289) 157, (293) 259
Topoisomerase II inhibition, (301) 177
Topoisomerase II inhibitors, (285) 175
Topoisomerase inhibitors, (288) 281, (303) 71
Toxicity, (298) 31
TOXNET, (297) 97
TPA, (284) 185
Tracheal epithelial cells, (300) 179
Tradescantia, (303) 77
Trans-acting factor, (294) 101
Trans-β-substituted styrene 7,8-oxides, (290) 165
Transcription, (289) 61, (296) 17
Transcription activation, (294) 101
Transfection, (294) 309
Transformation, (284) 265, (289) 281, (299) 233
Transformation assay, (298) 71
Transforming DNA, (302) 147
Transgenes, (298) 145
Transgenic mice, (285) 221, (292) 69, (302) 61, (302) 91
Transgenic mice and rats, (288) 133
Transgenic targets, (301) 99
Transitions, (294) 127
Translation, (296) 17
Translesion synthesis, (288) 207
Translocations, (285) 315
Transposable elements, (302) 201
Trans-species carcinogens, (286) 111
Transversions, (294) 127
Treatment length, (303) 101
Treosulphan, (300) 77
Triarylmethane dye, (298) 139
2,4,6-Trichlorophenol, (303) 101
Trichlorophenols, (303) 101
Trichothiodystrophy, (289) 47
Tricyclic antidepressants, (286) 155
Triethylenemelamine, (302) 157, (302) 161
Triethyllead acetate, (298) 1
Trihalomethanes, (300) 241
Triplet excited state, (287) 165
2,2′,2′-Tripyridyl, (300) 223
Trisomy, (296) 69
Trypan blue, (291) 21, (291) 193
dTTP depletion, (289) 73
Tubulin polymerisation, (287) 23
Tumorigenicity, (284) 265
Tumour progression, (290) 3
Tumour promoters, (284) 185
Tumour suppressor genes, (284) 15, (288) 113, (290) 3
Two-component heterokaryons, (285) 145
Tyre industry, (302) 197
Tyrosinase, (286) 199

Ubiquitination, (289) 83
pUC18 plasmid DNA, (299) 165
Ultraviolet, *see also* UV
Ultraviolet, (299) 219, (303) 19
Ultraviolet light, (286) 145, (287) 141, (289) 131
Ultraviolet radiation, (293) 99
UmuC mutation, (293) 241
UmuDC, (285) 95, (303) 1
UmuDC proteins, (297) 313
Unburnt bidi tobacco, (299) 103

Undaria pinnatifida (Wakame), (303) 63
Unscheduled DNA synthesis, (287) 157, (287) 307, (291) 21, (293) 173, (298) 71
Unscheduled DNA synthesis, in human keratinocytes, (291) 105
Uracil, (302) 183
Uracil-DNA glycosylase, (288) 249
Uracil DNA glycosylase, (288) 249, (293) 133, (294) 109
URA3 locus, (289) 97
Urban air particulate matter, (303) 55
Urban air pollution, (298) 113
Urethane, (285) 27
US FDA, (290) 53
UV, (286) 293, (293) 55
UV damage, (294) 91
UV-dosage–survival curves, (293) 65
UV-induced photolesion, (299) 271
UV induction, (293) 241
UV irradiation, (290) 239, (294) 69
UV light, (295) 125
*Uvr*A, (303) 1
UvrA and *fpg-1* mutants of *E. coli*, (294) 43
UvrABC endonuclease, (294) 263, (302) 53
UvrA protein, (290) 249
UV-sensitive mutants uvs12, uvs13, (293) 65
Uvs-2, nucleotide excision repair-deficient strain, (285) 145

Vanillin, (298) 163
o-Vanillin, (298) 163, (302) 13
Variability, (291) 53
Various carcinogens, (302) 129
V79/B7 cells, (301) 177
V79 cells, (285) 201, (294) 207, (300) 223, (301) 65, (301) 249
Vent, (303) 171
Viability, (291) 21
Viable albino deletions, (286) 199
Vicia faba, (302) 157, (302) 161
Visible light, (299) 135
Vitamin C, (298) 157, (299) 29, (301) 143
Vitamin E, (288) 257, (301) 143
V79 mutant cells, (299) 297
VP-16, (290) 265

Waste water, (298) 91
Waste water condensate, (300) 223
Water extracts of guava, (300) 1
Water quality, (298) 25
Wheat, (287) 23
Wing spot test, (298) 277
Wy-14,643, (286) 123

XAD resin, (298) 125
Xanthine–guanine phosphoribosyl transferase locus, (300) 63
Xenobiotic metabolizing enzymes, (295) 223
Xenopus laevis, (292) 83
Xeroderma pigmentosum, (284) 25, (284) 275, (293) 47, (293) 55, (293) 143, (294) 29, (294) 149
X-rays, *see* X-Rays
XRS-5, (285) 261
Xrs1, (293) 259
Xrs mutants, (294) 101

Yeast, *see also Saccharomyces cerevisiae* (284) 185, (286) 243, (289) 17, (289) 27, (289) 61, (289) 165, (293) 233, (299) 219, (301) 165
YG strains, (301) 157

Zinc binding domains, (294) 263
Zinc dithiocarbamates, (302) 1
Zygote, (296) 43, (296) 167
Zygote chromatin spatial distribution, (296) 33
Zygote, mutations induced in, (296) 107

Free Radical Damage and its Control

Edited by **Catherine A. Rice-Evans,** *Free Radical Research Group, United Medical and Dental Schools, Guy's & St. Thomas's Hospital, St Thomas's Street, London, UK SE1 9RT,* and
Roy H. Burdon, *Department of Biochemistry and Biotechnology, The Todd Centre, University of Strathclyde, Glasgow, UK* G4 0NR

New Comprehensive Biochemistry Volume 28

This book provides a comprehensive treatise on the chemical and biochemical consequences of damaging free radical reactions, the implications for the pathogenesis of disease and how this might be controlled endogenously and by radical scavenging drugs. Oxidative stress may be influenced by exogenous agents of oxidative stress, radiation, trauma, drug activation, oxygen excess, or by exogenous oxidative stress which is associated with many pathological states including chronic inflammatory disorders, cardiovascular disease, injury to the central nervous system, and connective tissue damage. This and many other such aspects are presented clearly and in depth.
The development of antioxidant drugs depends on the understanding of the mechanisms underlying the generation of excessive free radicals *in vivo*, the factors controlling their release and the site of their action. This excellent volume presents an up-to-date account of the current state of knowledge in these areas.

Contents: Part I. Chemical and Biochemical Aspects. Chapter 1. Chemistry of iron and copper in radical reactions (W.H. Koppenol). 2. Some chemical and biochemical constraints of oxidative stress in living cells (J. Chaudière). 3. Ferryl iron and protein free radicals (C.E. Cooper). 4. Antioxidants and free radical scavengers (A.T. Diplock). 5. Formation of free radicals and mechanisms of action in normal biochemical processes and pathological states (C.A. Rice-Evans). 6. Free radicals and cell proliferation (R.H. Burdon). **Part II. Pathological Aspects.** 7. Therapeutic iron chelating-agents (S. Singh, R.C. Hider). 8. Free radicals in central nervous system injury (E.D. Hall). 9. Ultraviolet radiation (UVA, UVB) and skin antioxidants (L. Packer). 10. Free radicals and atherosclerosis (J.C. Fruchart, P. Duriez). 11. Chemical aspects of free radical reactions in connective tissue (B.J. Parsons). 12. Free radicals and connective tissue damage (M.S. Baker). 13. Free radicals in toxicology with an emphasis on electron spin resonance investigations (R.P. Mason, C.F. Chignell). 14. Radical generation and detection in myocardial injury (B. Kalyanaraman, E.A. Konorev, J. Joseph, J.E. Baker). 15. Free radical pathways in the inflammatory response (P.G. Winyard, C.J. Morris, V.R. Winrow, M. Zaidi, D.R. Blake). Index.

©1994 408 pages Hardbound
Price: Dfl. 310.00 (US$177.25)
ISBN 0-444-89716-X

ELSEVIER
An imprint of Elsevier Science

Obtainable from your bookseller or:

in the U.S.A. and Canada:
P.O. Box 945,
Madison Square Station,
New York, NY 10160-0757
Tel: (212) 633-3650
Fax: (212) 633-3880.

rest of the world:
P.O. Box 211,
1000 AE Amsterdam
The Netherlands. Fax: +31 (20) 5803-705

The Dutch Guilder price is definitive. The US $ price is subject to exchange rate fluctuations. Orders from individuals must be accompanied by a remittance. Customers in the European Community should add the Value Added Tax applicable in their country.

94/B0/117

Hybridization with Nucleic Acid Probes

Part I: Theory and Nucleic Acid Preparation
Part II: Probe Labeling and Hybridization Techniques

by **P. Tijssen**

Laboratory Techniques in Biochemistry and Molecular Biology Volume 24

Recent breakthroughs in recombinant DNA technology and the availability of sophisticated equipment accessible to almost any laboratory, have contributed to the development and perfection of powerful hybridization tools. Recently, nucleic acid hybridization has not only become a cornerstone in molecular biology research but also a powerful supplement to other diagnostic tools.

These diagnostic methods are set out in a logical and clear two-part volume in this now famous **Laboratory Techniques** series. The volume is divided into theory and preparation (Part I), and probe labelling and hybridization techniques (Part II). Both parts are worthy additions to this series, designed for easy access of information on the laboratory bench.

Contents Part 1:

(Excluding sub-sections) Full contents list available on request. **1. Introduction.** 1.1 Terms and definitions of assay parameters. 1.2 History and development of hybridization. 1.3 Organization of this volume **2. Overview of principles of hybridization and the strategy of nucleic acid probe assays** 2.1 Probability of complementarity of nucleic acid strands 2.2 Stability of nucleic acid duplices 2.3 Kinetics 2.4 Triple helices 2.5 Consequences of theoretical considerations for assay strategies 3. **Nucleic acid purification.** 3.1 Basic materials and techniques for nucleic acid purification 3.2 Preparation of DNA suitable for cloning and Southern hybridization 3.3 Purification of RNA for cloning and Northern hybridization 3.4 Rapid isolation of nucleic acids for hybridization or amplification 4. **Production of nucleic acids serving as probes.** 4.1 Construction of recombinant DNA molecules and their cloning 4.2 *Escherichia coli* strains used in molecular cloning 4.3 Vectors used for the production of probes 4.4 Preparation of cDNA 4.5 Insertion of foreign DNA into vectors 5. **Amplification of specific nucleic acids for hybridization.** Principles and comparison of amplification systems 5.2 Set-up of a laboratory for *in vitro* nucleic acid amplification 5.3 Polymer chain reaction 5.4 Isothermal amplification system 5.5 Ligase chain reaction 5.6 Qβ-replication system 5.7 Transcription-based amplification system 6. **Synthetic oligonucleotides.** 6.1 Chemical stability of nucleic acids 6.2 Selection of sequence for synthetic oligonucleotide probes 6.3 Chemical oligonucleotide synthesis and purification 6.4 Labeling of oligonucleotides 6.5 Impact of conjugation of oligomers on hybridization properties. **Appendix 1: Oligomer-duplex stability.** A.1.1. Thermodynamic prediction of oligomer duplex stability. A.1.2. Oligomer duplex retention during washing. **Appendix 2: Kinetics-** A.2.1. Theoretical impact of complexity and length of nucleic acid on the reannealing rate constant. A.2.2. Reassociation kinetics of nucleic acid strands at equimolar concentrations. A.2.3. Hybridization kinetics A.2.4. Kinetics of competing reactions A.2.5. Hybridization with unique membrane-bound sequences A.2.6. Hybridization with related membrane-bound sequences. References and Index (Parts I and II).

Contents Part 2:

(Excluding sub-sections). Full contents list available on request. **Chapters 1-6 are Part I of this title.** 7. **Labeling of probes and their detection.** 7.1 Choice of label and labeling method 7.2 Radioisotopic labeling and detection of nucleic acids 7.3 Nonradioactive primary labels 7.4 Recognition systems 7.5 Overview of enzymatic incorporation of labels into probes 7.6 Uniform incorporation of labels in nucleic acids 7.7 End-labeling of probes 7.8 Chemical modification of probes to introduce labels 7.9 Universal probes 7.10 Biological probes 8. **Mixed-phase and solution hybridization formats** 8.1 Materials and solutions 8.2 Slot/dot blot hybridization on membranes 8.3 (Semi)-solution hybridization 9. **Hybridization after electrophoretic fractionation of nucleic acids.** 9.1 Electrophoretic procedures 9.2 Transfer procedures 9.3 Hybridization in the gel or before electrophoresis 10. **Colony and plaque lift hybridization.** 10.1 Colony and plaque hybridization: different approaches 10.2 Colony hybridization 10.3 Plaque hybridization 10.4 Hybridization to colony or plaque nucleic acids 10.5 Selection, packing and purification of clones **11. *In situ* hybridization.** 11.1 Theoretical considerations 11.2 Cytological procedures 11.3 Hybridization procedures 11.4 Emerging *in situ* hybridization techniques **12. Selected applications of hybridization.** 12.1 Aims of subtractive or suppression hybridization 12.2 Hybrid selection of mRNA 12.3 S1 analysis of mRNA with DNA probes 12.4 RNase protection assays 12.5 Triple helices. 12.6 Current developments and prospects.
References and Index (Parts I and II).

©1993 **Part I:** 328 pages Hardbound Price: Dfl. 290.00 (US $ 165.75) ISBN 0-444-89884-0
Paperback Price: Dfl. 145.00 (US $ 82.75) ISBN 0-444-89883-2
©1993 **Part II:** 360 pages Hardbound Price: Dfl. 295.00 (US $ 168.50) ISBN 0-444-89886-7
Paperback Price: Dfl. 150.00 (US $ 85.75) ISBN 0-444-89885-9
Set Hardbound ISBN 0-444-89888-3
Price: Dfl. 468.00 (US $ 267.50)
Set Paperback ISBN 0-444-89887-5
Price: Dfl. 236.00 (US $ 134.75)

Obtainable from your bookseller or:

in the U.S.A. and Canada:
P.O. Box 945, Madison Square Station,
New York, NY 10160-0757
Tel: (212) 633-3650, Fax: (212) 633-3880.

rest of the world:
P.O. Box 211, 1000 AE Amsterdam
The Netherlands, Fax: +31 (20) 5803-705

The Dutch Guilder price is definitive. The US $ price is subject to exchange rate fluctuations. Orders from individuals must be accompanied by a remittance. Customers in the European Community should add the Value Added Tax applicable in their country.

93/BO/134

ELSEVIER
An Imprint of Elsevier Science

Publication schedule for 1994

Mutation Research is published according to a volume numbering scheme that embraces all sections of the journal, in addition each section has its own colour code.

MUT (green), Fundamental and Molecular Mechanisms of Mutagenesis; MUTENV (blue), Environmental Mutagenesis and Related Subjects; MUTDNA (brown), DNA Repair; MUTAGI (red), DNAging: Genetic Instability and Aging; MUTREV (purple), Reviews in Genetic Toxicology; MUTGEN (pink), Genetic Toxicology; MUTLET (yellow), Mutation Research Letters.

1994	MUT	MUTENV	MUTDNA	MUTAGI	MUTREV	MUTGEN	MUTLET
Jan. 1	304/1		314/1			320/1	323/1
Jan. 16	304/2						
Feb. 1	305/1	312/1		316/1	317/1	320/2	323/2
Mar. 1	305/2		314/2			320/3	323/3
Apr. 1	306/1	312/2		316/2	317/2	320/4	323/4
Apr. 16	306/2						
May 1	307/1		314/3			321/1	324/1
June 1	307/2	312/3		316/3	317/3	321/2	324/2
July 1	308/1		315/1			321/3	324/3
July 16	308/2						
Aug. 1	309/1	313/1		316/4	318/1	321/4	324/4
Sep. 1	309/2		315/2			322/1	325/1
Oct. 1	310/1	313/2		316/5	318/2	322/2	325/2
Oct. 16	310/2						
Nov. 1	311/1		315/3			322/3	325/3
Dec. 1	311/2	313/3		316/6	318/3	322/4	325/4
22 Vols.	8 Vols.	2 Vols.	2 Vols.	1 Vol.	2 Vols.	4 Vols.	3 Vols.
304–325	304–311	312, 313	314, 315	316	317, 318	319–322	323–325
68 issues	16 issues	6 issues	6 issues	6 issues	6 issues	16 issues	12 issues
+ INDEX *							

* Author and Subject Index for the year 1994 (covering all sections).

The following issues of MUTATION RESEARCH were published ahead of schedule in 1993, in order to reduce publication time. MUTGEN (pink), 319/1, Sep. 1993; 319/2, Oct. 1993; 319/3, Nov. 1993; 319/4, Dec. 1993. The issues remain part of the 1994 subscription year. We apologize for the inconvenience these changes in schedule may cause.

Subscription Information

Subscription orders can be entered only by calendar year (Jan.–Dec.) and should be sent to Elsevier Science B.V., Journal Department, P.O. Box 211, 1000 AE Amsterdam (The Netherlands), telephone 31.20.5803642, fax 31.20.5803598, or to your usual subscription agent.

Subscriptions are accepted on a prepaid basis only, unless different terms have been previously agreed upon. Subscription rates and conditions for Members are available upon request from the Publisher.

Postage and handling charges include surface delivery except to the following countries where air delivery via SAL (Surface Air Lift) mail is ensured: Argentina, Australia, Brazil, Canada, Hong Kong, India, Israel, Japan, Malaysia, Mexico, New Zealand, Pakistan, PR China, Singapore, South Africa, South Korea, Taiwan, Thailand, U.S.A.

For all other countries airmail rates are available upon request.

Claims for missing issues must be made within six months of our publication (mailing) date, otherwise such claims cannot be honoured free of charge.

This Journal has adopted the ADONIS System. Copies of individual articles can be printed out from CD-ROM on request. An explanatory leaflet can be obtained by writing to ADONIS b.v., P.O. Box 839, 1000 AV Amsterdam (The Netherlands).

In the United States and Canada: For further information concerning this or any other Elsevier Science journal, contact Elsevier Science Inc., Journal Information Center, 655 Avenue of the Americas, New York, NY 10010, U.S.A., tel. (212) 633-3750, telefax (212) 633-3990, telex 420-643 AEP UI.

PRINTED IN THE NETHERLANDS

FUNDAMENTAL AND MOLECULAR MECHANISMS OF MUTAGENESIS

CONTENTS

Cited in Biological Abstracts; Chemical Abstracts; Current Awareness in Biological Sciences (CABS); Current Contents/Life Sciences; Excerpta Medica; Index Medicus

Master Author Index to Volumes 284–303 (1993) 1

Master Keyword Index to Volumes 284–303 (1993) 33

0027-5107(1993)284/303*;1-0